



Silver Oak University

Institute of Design

Bachelor of Design – Fashion & Textile Design

Curriculum Booklet

Academic Year: 2022-23

Department of Design

Vision :-

As a premier design institute, our vision is to be recognized for excellence in education and pioneering research, making significant contributions to societal advancement and national progress.

Mission :-

1. To provide a dynamic academic environment where design education intersects with scholarly inquiry, fostering a culture of critical thinking, creativity, and interdisciplinary collaboration.
2. To integrate inquiry-driven approaches into our curriculum, empowering students to explore, experiment, and discover at the intersection of design and research.
3. To empower students with the knowledge, skills, and ethical framework necessary to navigate complex design challenges ethically, equipping them to become compassionate and conscientious leaders in the global design community.

Program Educational Objectives (PEOs)

PEO1 Cultivate graduates capable of crafting innovative and visually captivating fashion and textile designs that engage diverse audiences.

PEO2 Prepare graduates to design innovative and appealing fashion and textile products that captivate diverse audiences.

PEO3 Provide graduates with the competencies to navigate shifting fashion trends, technological advancements, and sustainable methodologies in the fashion and textile sector.

Program Outcomes (POs)

PO1 Design Knowledge: The ability to give comprehensive knowledge of design methodology, production and its management in the field of design.

PO2 Problem analysis: systematically identifying, understanding, and defining the challenges or opportunities that require creative solutions within a given context or problem space, guiding the design process towards effective problem-solving and innovation.

PO3 Design/development of solutions: The ability to design a system, component, or process to meet desired needs within realistic projects related to economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

PO4 Problem Solving: The ability to identify, formulate, and solve technical problems.

PO5 Professional Skills: To demonstrate Entrepreneurial and Business Skills, Management, Leadership and Team Work.

PO6 Individual and team work: The ability to function effectively as an individual, and as a member or leader in diverse teams on multidisciplinary environments.

PO7 Communication Skills: effectively conveying ideas, concepts, and solutions to various stakeholders through visual, verbal, and written means, facilitating collaboration, understanding, and alignment throughout the design process.

PO8 Ethics: The understanding of professional and ethical responsibility.

PO9 Project Management and Finance: planning, organizing, and overseeing tasks, resources, and timelines to ensure efficient execution of design projects, while finance in design encompasses budgeting, cost estimation, and financial analysis to optimize resources and achieve project goals within financial constraints.

PO10 Life-long learning: Recognize the need for and have the preparation and ability to

engage in independent and life-long learning in the broadest context of technological change.
PO11 The Designer and society: Apply reasoning informed by contextual knowledge to assess craft, societal, health, safety, legal issues and the consequent responsibilities relevant to the professional design practice.

PO12 Environment and Sustainability: Understand the impact of the professional design solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Program Specific Outcomes (PSOs)

PSO1 Creative Fashion enables graduates to craft trendsetting designs that captivate diverse audiences and embody contemporary aesthetics, enriching the fashion industry with fresh creativity and innovation.

PSO2 Textile Innovation empowers graduates to spearhead advancements in textile design through pioneering techniques, materials, and processes, leading to the creation of innovative and sustainable products that redefine the landscape of product design.

Bachelor of Design

Fashion & Textile

Design

Credit Structure

Course Code	Course Name	L	T	P	Credits
Semester 1					
1130373101	Art Appreciation	15	0	30	2

1130373102	History of World Art	15	0	30	2
1130373103	Basics of Design Drawing	0	0	120	4
1130373104	Basics of Colour Theory	0	15	60	3
1130373105	Basic Photography & Digital Representation	0	15	90	4
1130373106	Geometrical Construction & Material Studies	0	30	90	5
Semester 2					
1130373107	History of Indian Art	15	0	30	2
1130373108	Indian Craft & Culture	15	0	30	2
1130373109	Advanced Design Drawing	0	15	60	3
1130373110	Advanced Colour Appreciation	0	15	60	3
1130373111	Principles & Elements of Design	0	15	120	5
1130373112	Design Process	0	15	120	5
Semester 3					
1130373201	Fashion Illustration I	0	0	90	3
1130373202	History of Indian Costume	30	0	0	2
1130373203	Fashion Studies	30	0	0	2
1130373204	Textile Studies I	30	0	0	2
1130373205	Draping I	0	0	60	2
1130373206	Pattern Making & Garment Construction I	0	0	120	4
1130373207	Surface Design Techniques I	0	0	60	2
1130373208	Design Process I	0	0	90	3
Semester 4					
1130373209	Textile Studies II	30	0	0	2
1130373210	History of World costume	30	0	0	2
1130373211	Fashion Marketing	30	0	0	2
1130373212	Fashion Illustration II	0	0	90	3
1130373213	Pattern Making & Garment Construction II	0	0	120	4
1130373214	Draping II	0	0	60	2

1130373215	Surface Design techniques II	0	0	60	2
1130373216	Design Process II	0	0	90	3
Semester 5					
1130373301	Traditional Indian Textiles & Costumes	30	0	0	2
1130373302	Fashion Merchandising	30	0	0	2
1130373303	Fashion Illustration III	0	15	60	3
1130373304	Pattern Making & Garment Construction III	0	0	120	4
1130373305	Draping III	0	0	60	2
1130373306	Craft Project & Digital Documentation	0	0	60	2
1130373307	Advance Surface Design	0	0	30	1
1130373308	Fashion Styling & Photography	0	15	30	2
1130373309	Design Process III	0	0	60	2
Semester 6					
1130373310	World Textiles	30	0	0	2
1130373311	Fashion Illustration IV	0	15	60	3
1130373312	Pattern Making & Garment Construction IV	0	0	120	4
1130373313	Grading & CAD	0	15	30	2
1130373314	Manufacturing Process	0	15	30	2
1130373315	Portfolio Development	0	15	60	3
1130373316	Design Process IV	0	0	60	2
1130373336	Creative Pattern Making	0	0	60	2
1130373337	Couture/ Denim/Craft based project	0	0	60	2
Semester 7					
1130373401	Visual Merchandising	30	0	0	2
1130373402	Entrepreneurship Development	30	0	0	2
1130373403	Men's Wear Project	0	0	120	4
1130373404	Research Methodology	0	0	60	2

1130373491	Industry Internship	0	30	180	8
1130373438	Film, Fashion & Images	0	0	60	2
1130373439	Fashion Luxury Management	0	0	60	2
Semester 8					
1130373492	Graduation Project	0	0	600	20

SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Art Appreciation
Course Code: 1130373101



Semester: 1

1. Art Acknowledgement.

Objective:

1. To consider the definitions and boundaries of visual art, with an eye towards tolerance, understanding, and appreciation of the artist's intentions.
2. To impart an understanding of the physical techniques and expressive qualities of the various media used in the making of art.
3. To examine the art in its context, this means, against the cultural and historical backdrop of the societies that produced it.
4. To discuss visual arts in relation to other products of human activity and imagination, among which are history, literature, economics, philosophy, religion, science and the other arts.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
15	0	30	45	2

Content:

Unit No.	Contents	Teaching Hours
1	Aesthetics: Concept of beauty, Aesthetic experience, Multi-sensory factors affecting aesthetics	6
2	Introduction of Art: What is Art? Its purpose and its function	4

3	Visual Elements of Art: Line and Shape, Color, Texture, Space, Mass, Composition, Scale, Movement	6
4	Art, Craft and Design: Interrelationship and differences between craft and Design	5
5	Medium: Fresco, Oil, Pastel, Acrylic, Watercolor, Ink, Gouache, Tempera, etc.	5
6	Artists & Styles: Art movements, individual style, group style, cultural style, regional style, representational, abstract	5
7	Introduction Performing & Mainstream art: Dance, music, opera, theatre and musical theatre, magic spoken word, puppetry	5
8	Music: Pop, rock, Funk, Classical, Techno, Country, Metal	4
9	Dance: Ballet, Ballroom, Contemporary, Hip-Hop, Jazz, Folk Dance, Classical, etc.	5

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop an appreciation for each other and how we are all unique in our own way. Express creatively.	1 to 9
CO-2	Explain about visual art and art techniques. Interpret quality as a key value.	
CO-3	Develop intuition, reasoning, imagination, and dexterity into unique forms of expression and communication.	
CO-4	Appraise the role of diversity (gender, nationality, ethnicity, politics, and religious beliefs) in the development of visual culture – past, present and future.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

N/A

Books Recommended:

1. National Gallery of Art. *An Eye for Art: Focusing on Great Artists and Their Works*. National Gallery of Art.
2. Gordon, Pamela. *Art Matters*. Oxford University Press.
3. Hume, Helen D. *Art History & Appreciation*. John Wiley & Sons.

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO -1	3	1	3	1	3	3	3	3	-	3	3	1	1	2
CO -2	3	3	3	3	3	3	3	3	-	-	2	2	2	1
CO -3	3	3	3	3	3	3	3	3	-	3	3	3	1	1
CO -4	2	2	3	2	1	3	3	3	3	3	3	3	2	2



Semester: 1

1. Indian and Western Art History.

Objective:

1. Developing a method to interpret history based on ecological, geographic, and climatic influences rather than focusing solely on dynastic successions and conflicts.
2. Investigating changes and patterns in the lifestyles of ethnic groups, particularly when they reside in urban environments.
3. Documenting and safeguarding traditional skills and artistic practices.
4. As designers, it's crucial to analyze historical patterns and problem-solving approaches to learn from past skills and innovations.
5. Being able to recognize the cultural or artistic influences behind a particular aesthetic or product, whether observing or creating it.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
15	0	30	45	2

Content:

Unit No.	Contents	Teaching Hours
1	Introduction to Art History: What is Art? Its purpose and its function, Formal and Contextual Analysis, Style	4
2	Prehistoric Art in Europe: Prehistoric Background, Prehistoric Sculpture & Cave Paintings, Neolithic Art, Prehistoric Architecture	4
3	Indus Valley Civilization: Homes, Society & Culture, toys, art, terracotta, pottery, seals, jewelry	4

4	Mesopotamia: The ziggurat, Architecture, Sculpture, Relief, Linearism Cylindrical formation, jewels & Metal craft, Materials & techniques	4
5	Egypt: Architecture, Pyramids & Mummies, Characteristics of Egypt Sculptures & Paintings, Materials & Techniques, ancient Egypt symbols, God & Goddess, Gold & precious stones	4
6	Greek: Cycladic art, Sculpture, Geometric and Orientalizing Art, Archaic Art, Classical Art, Late Classical Art, Hellenistic Period, Ancient Greek Architecture and architectural sculpture	4
7	Rome: Roman portraiture, Architecture, Relief sculpture, God Goddess, Painting, Mosaics in the Roman World, Roman Coinage, jewelry & metal craft, Society & Culture	4
8	Byzantine: Society & Culture, Architecture, Early Byzantine period Middle Byzantine period, Late Byzantine period, Byzantine Painting icons & Mosaics	4
9	Medieval Europe: Architecture, Society & Culture, Science & Technology superstition, Paintings	4
10	Renaissance: Major Themes of the Renaissance, Society & Culture sculpture, paintings, Renaissance vs Middle Ages, Medici family Michelangelo, Raphael, Botticelli	3
11	Baroque & Rococo, Neoclassicism, Romanticism, Realism Impressionism, Post-Impressionism: Subject, Style, medium & Artists	3
12	Expressionism, Cubism, Surrealism, Pop Art: Subject, Style, medium & Artists	3

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Recognize the importance of history, art and culture and timeline development of human society.	1 to 12
CO-2	Identify and analyze the significance of historical changes that take place within a society or culture.	
CO-3	Explain and deliver presentations based on well-researched material.	
CO-4	Assess patterns of continuities within historical contexts.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

N/A

Books Recommended:

1. Foster, H., Krauss, R., Bois, Y. A., & Buchloh, B. H. D. (2004). *Art since 1900: Modernism, antimodernism, postmodernism*. Thames & Hudson.
2. Vasari, G. (1998). *Lives of the Artists* (J. C. Bondanella & P. Bondanella, Trans.). Oxford University Press.
3. Beard, Mary, and John Henderson. *Classical Art: From Greece to Rome*.

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO -1	3	1	1	1	-	3	3	3	-	3	3	3	2	1
CO -2	3	3	3	3	2	1	3	3	3	3	3	1	2	1

CO-3	3	3	3	3	3	1	3	3	-	3	-	1	1	1
CO-4	3	3	3	3	3	1	3	3	-	3	2	1	1	2



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Basics of Design Drawing
Course Code: 1130373103
Semester: 1

Prerequisite:

1. Command over basic drawing tools
2. Basic drawing and coloring skills

Objective:

1. Drawing as a basic skill and tool to observe and express creative ideas on paper.
2. To understand and develop the representation skills of different materials and textures.
3. To understand the human proportion and related dimensional stability.
4. To improve observation skills and develop overall drawing skills.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	0	120	120	4

Content:

Unit No.	Contents	Teaching Hours
1	Line Drawing - Horizontal Lines, Vertical Lines, Diagonal Lines Line Drawing - Zig-zag Lines, Wavy Lines, Irregular Zig-zag Lines, Irregular Wavy Lines Line Drawing - Spiral Straight Lines, Circles in Line, Adjoining Circles, Adjoining Eccentric Circles, Single Spiral	15
2	Line Drawing - Straight Line Composition, Continuous Li (Horizontal & Vertical), Continuous Lines (Diagonal Right & I Inclined) Line Drawing - Line to Circle, Ellipse Sizes Line Drawing - Composition of All Elements	8
3	Line Drawing - Different Shapes – Square, Circle, Triangle Line Drawing - GreyScale Line Drawing - Light Theory – Different shading techniqu Shading on Sphere, Cube, Cone, Cylinder	17

4	Still Life in Pencil – Shiny surface other than glass or metal Still Life in Pencil – Glass / Marble Still Life in Pencil - Metal	9
5	Still Life in Pencil - Wood Still Life in Pencil - Fabric Still Life in Pencil – Fruits & Vegetables	9
6	Still Life in Color medium – Shiny surface other than glass or metal Still Life in Color medium – Glass / Marble Still Life in Color medium – Metal	12
7	Still Life in Color medium – Wood Still Life in Color medium – Fabric Still Life in Color medium – Fruits & Vegetables	12
8	Human Figure – Joints identification, Stick figures Human Figure –Block figures, Mass Addition, Cloth Addition Human Figure – Understanding Human Anatomy	5
9	Human Figure – Live Human Figure Drawing Human Figure – Head Tilts Human Figure – Hand & Feet gestures	15
10	Nature Drawing - Contour Nature Drawing – Details Addition	5
11	Nature Drawing – Tonal Shading with Pencil Nature Drawing – In color medium	13

Course Outcome:

Sr. No.	CO statement	Unit No
CO -1	Develop hand & mind coordination, improvement of visual judgment, improvement of grip and line quality, improvement of focus	1 to
CO -2	Practice and understanding different color mediums and their application to represent various materials and textures	

CO-3	Analyze human proportion, development of quick figure sketching, improving observation	11
CO-4	Establish observation skills, advance learning of shading through rendering of nature based objects, pencils and different color mediums	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in a real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

1. Basic stationary kit (pencil, erasers, color palette, water container, and other relevant stationary)

Books Recommended:

1. Poxon, David. Different Strokes: Pencil Drawing. PURE Publishing.
2. Rankin, David J. Fast Sketching Techniques. North Light Books.
3. Eissen, Koos., & Steur, Roselien. Sketching The Basics. BIS Publishers.

List of Open Source Software/learning website:

N. A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	-	-	2	-	2	2	-	-	2	-	-	2	2
CO-2	3	-	2	-	-	-	2	-	-	-	-	1	2	2

CO-3	3	2	-	2	-	2	-	-	-	-	-	-	2	1
CO-4	3	2	-	-	-	-	2	-	-	-	-	2	2	2



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Basics of Color Theory
Course Code: 1130373104
Semester: 1

Prerequisite:

1. Basic understanding of colors

Objective:

1. Learning the basic principles and elements of color to achieve progressive development of color psychology.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	15	60	75	3

Content:

Unit No.	Contents	Teaching Hours
1	Color Theory	5
2	Exploration of swatches for Grey Scale	22
3	Development of Grey Scale	7
4	Exploration of swatches for Color Wheels	25
5	Development of Color Wheels	8
6	Development of Color Board (using different materials)	8

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Analyze color psychology and multiple aspects of various colors and related terminologies	1 to 6
CO-2	Practice the application of color and improvement in selecting multiple tones for various purposes on sheet	
CO-3	Experiment with the application of color theory, practically experiencing the varieties of colors in a color wheel	
CO-4	Analyze the color behavior in different materials	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in a real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

1. Basic stationary kit (pencil, erasers, color palette, water container, and other relevant stationary)

Books Recommended:

1. Patti, Mollica. Color Theory: An Essential Guide to Color. Walter Foster Publishing, Inc.
2. John, Gage. Color and Meaning: Art, Science, and Symbolism. Thames and Hudson.
3. Edwards, Betty. Color: A Course in Mastering the Art of Mixing Colors. Jeremy P. Teacher/Penguin.

List of Open Source Software/learning website:

N. A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	-	-	-	-	-	2	-	-	3	-	1	2	2
CO-2	3	-	2	-	-	-	2	-	-	2	-	-	2	2
CO-3	3	-	2	-	-	-	2	-	-	-	-	-	2	2
CO-4	3	2	-	-	-	-	2	-	-	2	-	-	2	2



SILVER OAK UNIVERSITY

Institute Name – Silver Oak Institute of Design

Programme Name: Fashion & Textile Design

Course Name: Basic Photography & Digital Representation

Course Code: 1130373105

Semester: 1

Prerequisite:

1. **Basic framing and composition skills.**

Objective:

1. Understanding photography as a basic tool to observe and document for the purpose of design studies and expressions.
2. Making students at par with the evolving industry and the digitalization that the world is moving towards.
3. Making students aware of different methods and softwares with which they can express creativity and ideas.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	15	90	105	4

Content:

Unit No.	Contents	Teaching Hours
1	Photography: History and evolution of Photography, Types of Photography & Techniques	5
	Photography: Study about Camera Equipment	
	Photography: Lenses and Focal Length	
2	Photography: Shutter Speed, Exposure, ISO	11
	Photography: Aperture and Depth of Field	
	Photography: Ambient Light, Color & Intensity, Introduced Light	
3	Photography: Background & Perspective	20
	Photography: Composition , Framing & Layering	
	Photography: Indoor & Outdoor photography, landscapes, portraits, etc.	
	Digital Representation: Computer Basic, Creating Folder, Directories, Input Unit, Output Unit, Hardware, Software, Windows shortcut keys	

4	Digital Representation: MS Word: Text Basics – Typing the text, Alignment of text, Editing Text, Cut, Copy, Paste, Select, Clear, Find & Replace	3
	Digital Representation: MS Word: Text Formatting & Saving Files – New, Open, Close, Save, Save As, Formatting Text, Font size, Font Style, Font color, Bold, Italic, Underline, Changing the text case, Line spacing, paragraph spacing, shading text and paragraph, working with tabs and indents	
	Digital Representation: MS Word: Working with Objects – Shapes, Clip Art and picture, Word Art, Smart Art, Columns and Orderings, Order of Objects, Page number, Date & Time, Inserting Text boxes, Inserting Word Art, Inserting symbols, Inserting chart	
5	Digital Representation: MS Word: Header & Footers – Inserting custom Header and Footer, Inserting objects in the header and footer, Adding section break to a document	4
	Digital Representation: MS Word: Working with bullets and numbered lists – Multilevel numbering and bulleting, creating list, customizing list style, page bordering, page background	
	Digital representation: MS Word: Tables – Working with tables, table formatting, table styles, alignment option, merge and split option	
	Digital Representation: MS Word: Styles and content – Using build-in styles, modifying styles, creating styles, creating a list style, table of contents, references, adding internal references, adding a footnote, adding endnote	
6	Digital Representation: MS Word: Merging Documents – Typing new address list, merging to envelopes, merging to label, setting rules for merges, first and merge options	5
	Digital Representation: MS Word: Sharing and Maintaining Documents – Changing word options, changing the proofing tools, managing templates, restricting document access, using protected view, working with templates, managing templates, understanding building blocks	
	Digital Representation: MS Word: Proofing the document – Check spelling, Identifying grammatical errors , setting auto correct options	
	Digital Representation: MS Word: Printing – Page setup, setting margins, print preview, print	
7	Digital Representation: MS PowerPoint: Setting up PowerPoint Environment – New, Open, Close, Save, Save As, Typing the text, Alignment of text, Formatting text, Font size, Font style, Font color, using Bold, Italic, Underline, Cut, Copy, Paste, Select, Clear, Find & Replace, Working with tabs and indents	7
	Digital Representation: MS PowerPoint: Creating Slides and Applying Themes – Inserting new slide, Changing layout of slides, Duplicating slides, copying and pasting slides, Applying themes to the slide layout, changing theme color, slide background, formatting slide background, using screen views	

	<p>Digital Representation: MS PowerPoint: Working with bullets and numbers – Multilevel numbering and bulleting, creating list, page bordering, page background, aligning text, text directions, columns option</p> <p>Digital Representation: MS PowerPoint: Incorporating interactive elements – Hyperlinks and Action Buttons – Inserting hyperlinks and action buttons, inserting hyperlinks and action button, word art and shapes</p>	
8	<p>Digital Representation: MS PowerPoint: Working with Movies and sound – Inserting movie from a computer file, inserting audio file, audio video playback and format options, video options, adjust options, reshaping video, bordering video</p> <p>Digital Representation: MS PowerPoint: Animation and Slide Transitions – Default animation, custom animation, modify a default or custom animation, reorder animation using transitions, apply a slide transition, modifying a transition, advancing to next slide</p> <p>Digital Representation: MS PowerPoint: Using a slide master – Inserting a slide layout option, inserting placeholders, formatting placeholders</p> <p>Digital Representation: MS PowerPoint: Slide show option – Start a slide show, start show from the current slide, rehearse time, creating custom slide show</p>	12
9	<p>Digital Representation: MS PowerPoint: Proofing and Printing – Check spelling, Setting autocorrect options, save as video, save as jpeg files, save as PowerPoint show file, print preview, print</p> <p>Digital Representation: Adobe Photoshop: Introduction – Raster vs Vector graphics – Creating new images, saving files for print, saving files for web/screen, working with adobe basics</p> <p>Digital Representation: Adobe Photoshop: Work Area – Using the toolbar, Using the options bar and other panels, undoing actions in Photoshop, customizing the workspace, tools panel overview, colour codes RGB and CMYK</p> <p>Digital Representation: Adobe Photoshop: Basic Photo corrections – Strategies for retouching, resolution and image size, adjusting the color in camera raw, straightening and cropping the image, replacing colors in an image, adjusting saturation with the sponge tool, repairing areas with the clone stamp tool, using the spot healing brush tool, using content aware fill, applying Unsharp Mask filter</p>	15
	<p>Digital Representation: Adobe Photoshop: Working with Selections – Alternating selecting and selection tools, using a quick selection tool, moving a selected area, manipulating selections, using the magic wand tool, selecting with the lasso tool, rotating a selection, selecting with the magnetic lasso tool, cropping an image and erasing within a selection, refining the edge of a selection</p>	

10	Digital Representation: Adobe Photoshop: Layer Basics – About layers, using the layer panel, rearranging layers, applying a gradient to a layer, applying layer style, Smart objects & artistic filters , flattening and saving files	23
	Digital Representation: Adobe Photoshop: Masks and Channels – Work with masks and channels, creating a mask, refining a mask, creating a quick mask, manipulating an image with Puppet wrap, working with channels	
	Digital Representation: Adobe Photoshop: Typographic Design – About typography, creating a clipping mask from type, creating type on a path, warping point type, designing paragraphs of type	

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Identify the historical period and technical processes and specifying the artistic interpretation of photography	1 to 10
CO-2	Apply the principles of lighting and color theory to a variety of photographic scenarios by measuring, evaluating and adjusting light and color to create quality images.	
CO-3	Apply principles of composition to produce professional images. Applying the mechanics of exposure to control light and influence the	
CO-4	Plan a new presentation and modify presentation themes, adding and editing text to slides	
CO-5	Develop composite images that demonstrate advanced selection and layering techniques and produce images for Web and print output with appropriate sizing and resolution.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in a real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

1. DSLR Camera & Phone camera.

2. Modern Desktop with Design Softwares.

Books Recommended:

1. Mitoke, Jim. Better photo basics. Amphoto books.
2. House, Dorothy. Microsoft Word, Excel and Powerpoint. Outskirts press.
3. Chavez, Conrad. Adobe photoshop classroom in a book. Adobe press.

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	-	-	-	-	-	2	-	-	-	2	-	2	2
CO-2	3	-	3	-	-	-	3	-	-	-	3	-	2	2
CO-3	3	-	3	-	-	-	3	-	-	-	3	-	2	2
CO-4	3	-	3	-	-	-	3	-	3	-	-	-	2	2
CO-5	3	-	3	3	-	-	3	-	-	-	-	-	2	2



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Geometrical Construction & Material Studies
Course Code: 1130373106
Semester: 1

Prerequisite:

1. **Basic understanding of geometric shapes.**

Objective:

1. Math and Geometry are technical tools to support and to express design ideas.
2. Understanding material as a basic tool to implement design ideas and creative thinking.
3. Understanding basic geometry and expression of different explorations from circle to square and triangle to polygons.
4. Exploring different materials, each having different characteristics like soft and solid, linear materials and 2D flat materials to create 3D forms and volumes.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	30	90	120	5

Content:

Unit No.	Contents	Teaching Hours
1	Historical background and application of geometry around us	2
2	Understanding the tools used for construction in geometry	2
3	Geometrical construction – Basics	24
4	Golden proportions and construction of Golden spiral and practical application	5
5	Study of polygons	5
6	Regular and semi-regular geometric grids	5

7	Platonic solids and study of their inter-relationships	10
8	Truncations of Platonic solids and Derivation of Archimedean Solids	12
9	Tessellations and its types	7
10	Classification of Materials: Soft, medium and hard	1
11	Material exploration: Clay, terracotta	16
12	Material exploration: Thermocol	5
13	Material exploration: wood, bamboo	16
14	Material exploration: soft material and surface generation	10

Course Outcome:

Sr. No.	CO statement	Unit No.
CO-1	Analyze concepts like circle, ellipse, or regular polygon, volume of Platonic and Archimedean solids, Plane, Volume and transition from the plane to volume.	1 to 14
CO-2	Calculate the geometrical elements like angle, edge, surface and intersection.	
CO-3	Develop the appropriate geometry according to the product	
CO-4	Analyze the behavior and working of different materials categorized as soft, medium and hard.	
CO-5	Analyze the tools requirement and the process to change the form and work with materials.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in a real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

1. Drawing/ Drafting Board, Instrument Set for Geometric Construction.

Books Recommended:

1. Allen, Jon. Drawing Geometry. Floris books.
2. Elam, Kimberly. Geometry of Design. Princeton architectural press.
3. Ashby, Mike.,& Johnson, Kara. Materials and Design. Butterworth-Heinemann

List of Open Source Software/Learning Website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	2	2	2	2	-	-	-	-	-	-	2	2	2	2
CO-2	2	2	2	2	-	-	2	-	-	-	1	1	2	2
CO-3	2	2	3	2	-	2	1	-	-	-	-	-	2	2
CO-4	1	1	2	2	2	-	-	-	-	-	2	2	2	2
CO-5	1	2	2	2	2	1	1	-	2	-	-	-	2	2



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: History of Indian Art
Course Code: 1130373107
Semester: 2

Prerequisite:

1. Basic knowledge of Indian art history

Objective:

1. Understand the origins and evolution of Indian art from prehistoric to contemporary times.
2. Analyze various techniques and styles in Indian paintings, sculptures, and architecture.
3. Interpret the cultural and religious influences on the development of Indian art.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
15	0	30	45	2

Content:

Unit No.	Contents	Teaching Hours
1	Introduction	2

2	Arts of Prehistoric Period: Prehistoric Era, Paintings, Materials used paintings	2
3	Arts of Indus Valley Civilization: Indus Valley civilization artifacts, Indus Valley art, Indus Valley Statues, Bronze statues, Terracotta statues, seal figurine, jewelry, gold in Indus valley	3.5
4	Arts of Vedic Period: Artifacts of Vedic period, Sculptures in Mauryan period, The Lion capital, Yakshas and Yakshinis, Cultures in Vedic period	3.5
5	Arts in Hinduism: Mauryan artifacts, Post Mauryan Gods, Brahma – The creator, Vishnu – The maintainer, Shiva – The destroyer, Hindu Gods and Goddess, Hindu art and symbolization, Myth, Legend and Folklore, Hinduism vs Buddhism	3.5
6	Arts in Buddhism: Theravada, Mahayana, Vajrayana, Buddhist Art, Depiction of Buddha, Padmapani Bodhisattva, Buddha head, Seated Buddha, Stupa, Jataka tales in Sanchi stupa, Monuments related to Buddha, Ajanta caves, Ellora caves	3.5
7	Murals: Indian Mural paintings	3.5
8	Arts in Jainism: Mahavira, Art in Jainism, Tirthankaras, Jain emblem, Jain flag, Jain manuscripts, Jainism	3.5
9	Temple Art and Architecture: Nagara style temples, Dravidian style temples, Vesara style temples, Khajuraho temples, Mahabodhi temple, Nalanda university, Jain temples, Mahabalipuram, Kailasnath temple	3.5
10	Arts of Mughal Period: Mughal Architecture, Mughal paintings, Palaces, painting and Ragamala, Traditional and Folk art	3.5
11	Arts of British Period	3.5
12	Arts of Pre-Independence	3.5
13	Arts of Post-Independence	2
14	Contemporary Art	4

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Analyze the origin of Ancient Indian Art and its evolution.	1 to
CO-2	Develop an understanding of various periods and art styles in ancient Indian art and to know their chronology.	

CO-3	Show deep learning of art styles and techniques to appreciate art of ancient India.	14
CO-4	Interpret the cultural and contextual aspect of ancient Indian Art.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

Digital Projector

Drawing and Painting Supplies

Sculpting Tools

Printmaking Supplies

Photography Equipment

Exhibition and Display Materials

Research Resources

Books Recommended:

1. **"Buddhist Art in India" by Joseph M. Dye**
2. **"Indian Art" by Partha Mitter**
3. **"A History of Indian Art" by Edith Tomory**
4. **"The Hindu Temple: An Introduction to Its Meaning and Forms" by George Michell**

5. "The Arts of India" by Susan L. Huntington

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	3	1	3	1	1	2	1	-	2	1	1	2	2
CO-2	3	2	1	1	-	1	3	-	-	3	-	1	2	2
CO-3	3	1	3	1	3	3	1	-	-	1	-	1	2	1
CO-4	3	1	1	1	1	1	1	3	0	1	3	3	2	2



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Indian Craft & Culture
Course Code: 1130373108
Semester: 2

Prerequisite:

1. Basic understanding of Indian crafts & culture.

Objective:

1. To impart knowledge of various Indian crafts and its functioning.
2. To know about the current scenario as well as factors influencing them.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
15	0	30	45	2

Content:

Unit No.	Contents	Teaching Hours
1	Historical Background of Indian Craft: Introduction to the basic concept in the evolution of crafts. Journey of various crafts over several decades and centuries.	9
2	Zone wise Introduction of craft: North, South, East, West, Central & North-East.	9
3	Types of craft: Metal craft, Wood craft, Leather craft, Paper craft, Textile craft, Stone craft, Pottery/Clay work, Terracotta work, Gems & Jewellery, Stone, Grass craft, Bamboo craft, etc.	11
4	Current Scenario of craft: Current situation of craft in Domestic & International Market.	9
5	Factors influencing craft: Social, Economic, Technological & Psychological, etc.	7

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop understanding of various Indian crafts.	
CO-2	Develop understanding of factors affecting crafts.	

CO-3	Develop a sense of personal identity and self-esteem through practical achievement in the expressive, communicative and functional modes of art, craft and design.	1 to 5
CO-4	Develop an awareness of the historical, social and economic role and value of art, craft and design and aspects of contemporary culture and	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

Digital Projector

Craft Tools and Materials

Documentation and Photography Equipment

Printmaking Supplies

Photography Equipment

Exhibition and Display Materials

Research Resources

Books Recommended:

1. **"Buddhist Art in India" by Joseph M. Dye**
2. **"Indian Art" by Partha Mitter**
3. **"A History of Indian Art" by Edith Tomory**

4. "The Hindu Temple: An Introduction to Its Meaning and Forms" by George Michell
5. "The Arts of India" by Susan L. Huntington

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	2	1	1	1	1	2	1	1	2	1	2	2	2
CO-2	2	3	2	3	2	2	2	2	1	2	2	2	2	2
CO-3	2	1	3	2	3	3	3	1	1	1	1	1	2	1
CO-4	2	2	1	1	2	2	2	2	1	2	3	3	2	1



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Advanced Design Drawing
Course Code: 1130373109
Semester: 2

Prerequisite:

1. Understanding of Basics of Design Drawing

Objective:

1. To comprehend the fundamental principles of visual communication, such as typography, color theory, layout, and composition.
2. To cultivate the ability to solve design problems effectively and innovatively.
3. To gain proficiency in using design software tools for creating and editing visual content.
4. To learn how to communicate messages clearly and effectively through visual means, considering audience and context.

Teaching Scheme:

Teaching Scheme

L	T	P	Contact Hours	Credit
0	15	60	75	3

Content:

Unit No.	Contents	Teaching Hours
1	Perspective: Perspective drawing and its application in sketches	1
2	Perspective: Types of perspective	1
3	Perspective: Cone of vision, Line of sight, Axis/angles	1
4	Perspective: Picture Plane, Foreshortening, Overlapping, inclined planes	1
5	Perspective: Vanishing point, Horizon/Eye Level	2
6	Perspective: One point perspective, Two point perspective, Three point perspective	19
7	Isometry: Isometric grid	3
8	Isometry: 2D strips in different planes	3
9	Isometry: 3D strips in different planes	3
10	Isometry: 3D Profile Travelling	3
11	Isometry: Circle plotting in isometric grid	2
12	Isometry: Rim Division	1
13	Isometry: 2D curved strips in different planes	3
14	Isometry: 3D curved strips in different planes	3
15	Isometry: Product drawing and Tessellations	4
16	Orthography: Orthographic drawing	1
17	Orthography: Graphical projections, Orthographic projection	2
18	Orthography: First and third angle projection, view selection, principal views, planes of projection, view placement, line conventions, transferring of dimensions	3
19	Orthography: Principles of Orthographic projection, Alignment features, Distances in related views, true length and size, foreshortening, configuration of planes, parallel features, edge views	2

20	Orthography: one view drawings, two view drawings, multiple view drawings	7
21	Orthography: Representation of fillet and rounded corners, chamfers, runouts, elliptical surfaces, irregular or space curves, intersecting cylinders, cylinders intersecting prisms, cylinders intersecting holes	3
22	Orthography: Surface labelling, vertex labelling, Physical model construction, Sectional Orthography	7

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Recognize the difference between a one-point perspective, a two-point perspective and a three-point perspective drawing.	1 to 22
CO-2	Develop isometric grid and develop product drawings.	
CO-3	Visualize geometrical solids in 3D space through exercises in Isometric and Orthographic projections.	
CO-4	Interpret Orthographic, Isometric and Perspective views of objects.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

Drawing and Sketching Tools

Computers and Software

Photography Equipment

Printing and Presentation Tools:

Books Recommended:

1. "Isometric Drawing Explained" by G. H. Pearson
2. "Orthographic Projections" by Mirza HyderBaig, KmaAzeem
3. "Perspective Made Easy" by Ernest R. Norling

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	-	-	-	-	-	3	-	-	-	-	-	2	1
CO-2	-	-	3	-	-	-	3	-	-	-	-	-	2	2
CO-3	-	-	3	-	-	-	3	-	-	-	-	-	2	1
CO-4	-	-	-	-	-	-	3	-	-	-	-	-	2	2



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Advanced Color Appreciation
Course Code: 1130373110
Semester: 2

Prerequisite:

1. Understanding of Basics of Color Theory

Objective:

1. Learning the principles and elements of color interaction and compositions.
2. Exploring different elements starting from color wheel to various tints and shades.
3. Expressing skills of basic theory of color by practical exercises.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	15	60	75	3

Content:

Unit No.	Contents	Teaching Hours
1	Theory of color interaction	1
2	Value and Saturation	10
3	Warm and cool colors, Neutral colors	1

4	Color Schemes: Achromatic, Monochromatic, Complementary, Triadic, Analogous, Split Complementary or Compound, Tetradic	4
5	Interaction of foreground and background colors	7
6	Interaction of Analogous colors	12
7	Interaction of colors through window and background	8
8	Interaction of colors through a grid and background	8
9	Form and color	13
10	Color Board	11

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Analyze and express an understanding of color theory systems through successful completion of hands on projects	1 to 10
CO-2	Show idea generation through Visualization, creative thinking, critical judgment and the employment of color theory concepts to communicate ideas effectively through successful completion of hands on projects and participation in class critiques	
CO-3	Express mastery of concepts taught in Color Interaction in fashion	
CO-4	Develop and establish a foundation of color knowledge that will influence color decisions for the rest of one's life	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

1. Basic stationary kit (pencil, erasers, color palette, water container, and other relevant stationary)

Books Recommended:

1. Albers, Josef, & Weber, Nicholas Fox. "Interaction of Color". Yale University Press.
2. Gerstner, Karl. "The Forms of Color". MIT Press.
3. Quiller, Stephen. "Color Choices". Watson-Guption Publications.

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	-	2	-	2	-	-	-	2	1	-	-	2	1
CO-2	3	-	2	-	2	-	-	2	2	1	-	-	2	2
CO-3	3	-	3	-	3	-	-	-	-	2	-	-	1	1
CO-4	3	-	2	-	-	2	-	-	-	2	-	-	2	2



SILVER OAK UNIVERSITY

Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Principles and Elements of Design
Course Code: 1130373111
Semester: 2

Prerequisite:

1. An understanding of all the modules previously completed in Semester 1 and Semester 2.

Objective:

1. Learning basic principles and elements of design with the terminology of transformation from shape to form, i.e., 2D to 3D.
2. Understanding relationship of form and space with human factor and visual perception.
3. Expression of form, space and dynamics of the form with an understanding of expression and functionality.
4. Development of form for the purpose of utility as a design element for human need like product, for interiors, for fashion, for lifestyle, for visual communication, etc.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit

0	15	120	135	5
---	----	-----	-----	---

Content:

Unit No.	Contents	Teaching Hours
1	Elements of Design: Point/Dot, Line, Plane/Shape, Form/Volume/Mass, Texture/Pattern, Color, Tone/Value, Space, Time	15
2	Application of elements in Fashion	5
3	Gestalt Law: Similarity, Continuation, Closure, Proximity, Figure Ground, Symmetry & Order	20
4	Principles of Design: Harmony/Unity, Rhythm, Contrast, Emphasis, Movement, Balance, Proportion, Variety, Pattern/Repetition	20
5	Form: Types of Form – Organic, Geometric, Static, Dynamic, Kinetic, Volume, Mass, Abstract, Linear, Planar, etc.	5
6	Form Generation, Angle Manipulation, Radii Manipulation, Shape transition	25
7	Study of form through: Relief structures, Linear forms, Planar forms, Volumetric forms, Massive forms, Spatial forms, Textured forms, Sectional planes, Subtractive construction, Additive construction, Wire sculpture	25
8	Pattern, Texture, Tone, Final Project	20

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Practice a variety of brainstorming techniques to generate novel ideas of value to solve problems.	1 to 8
CO-2	Develop ideas that are relevant and responsive to the world around them.	
CO-3	Articulate the content, context, and the process of their work visually, orally and in writing.	
CO-4	Identify and develop behaviors, such as curiosity, initiative, and persistence, which will help them engage with the world in productive ways.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

1. Basic stationary kit (pencil, erasers, color palette, water container, and other relevant stationary).

Books Recommended:

1. Lidwell, William,. & Holden, Kristina,. & Butler, Jill. "Universal Principles of Design". Rockport Publishers.
2. Norman, Don A.. "The Design of Everyday Things". Basic Books.
3. Allen, Batchelder Ernest. "The Principles of Design". The Inland Printer Company.

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	2	-	1	2	-	-	2	-	3	-	-	2	1
CO-2	3	-	2	-	-	2	-	-	2	2	-	-	1	2

CO-3	3	-	-	-	-	-	2	-	2	3	-	-	2	1
CO-4	3	2	-	2	-	2	-	2	-	2	-	-	2	1



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Design Process
Course Code: 1130373112
Semester: 2

Prerequisite:

1. An understanding of all the subjects of Semester 1 and Semester 2.

Objective:

1. To make students aware of very basic and simple design process thinking by using the education experience they have gone through during all the previous modules.

2. Taking up hypothetical design solving problem and working out systematic problem solving methods, and arriving at an acceptable hypothetical design solution with mock model.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	15	120	135	5

Content:

Unit No.	Contents	Teaching Hours
1	Brainstorming: Identification of problem	15
2	Research Analysis and selection of problem	20
3	Design Brief	10
4	Ideation	20
5	Prototyping and feedback research	25
6	Selection and modification of design	10
7	Final and probable solutions to a design problem	20
8	Evaluation and feedback	15

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Recognize and interpret Design Thinking concepts and principles.	1 to 8
CO-2	Practice the methods, processes, and tools of Design Thinking.	
CO-3	Apply the Design Thinking approach and model to real world	
CO-4	Analyze the role of primary and secondary research in the discovery stage of the Design Process.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Classroom Explanations.
2. Tutorials for certain creative implementations of the exercises.
3. Experiencing and practicing in real/actual environment.
4. Group tasks, team work.
5. Presentations and display of work.

Major Equipment:

Computer and Software

Drawing and Sketching Tools

Photography and Videography Equipment

Printing and Prototyping Tools

Workshop Tools

Books Recommended:

1. **"Designing Brand Identity: An Essential Guide for the Whole Branding Team"**
by Alina Wheeler
2. **"The Elements of Graphic Design"** by Alex W. White
3. **"The Design of Everyday Things"** by Don Norman
4. **"Interaction of Color"** by Josef Albers
5. **"The Art of Looking Sideways"** by Alan Fletcher

List of Open Source Software/learning website:

N.A.

CO-PO



Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	-	-	-	-	-	3	-	-	-	-	-	2	1
CO-2	-	3	-	3	-	-	3	-	-	-	-	-	1	2
CO-3	-	-	3	-	-	-	-	-	-	3	-	-	1	2
CO-4	-	3	-	3	-	-	-	3	-	-	2	-	1	1

SILVER OAK UNIVERSITY

Institute Name – Silver Oak Institute of Design

Programme Name: Fashion & Textile Design

Subject Name: Fashion illustration - I

Subject Code: 1130373201

Semester: III

Prerequisite:

Human Drawing
 Techniques of using different color mediums

Objective:

1. To develop skills in drawing the human body as a 3D form
2. To understand the principles of balance and movement of the figure.
3. To understand the importance of Anatomical Studies as the basis of fashion illustration.
4. To develop both a free distinctive style of drawing combined with analytical skills of visual assessment
5. Differences between a normal figure and a fashion figure proportions
6. To develop Software skills related to *Corel Draw* and *Adobe Illustrator* and their application in fashion illustration

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	0	90	90	3

Content:

Unit	Contents	Teaching Hours
1	Introduction to fashion illustration , illustration styles and proportion the 20th century	6
2	to understand the role of Fashion illustration as a mode of expression representation for contemporary apparel styles.	6
3	Understanding movement, balance and weight distribution of the with movable ball joints.	3

4	3D body proportions in terms of simpler geometric shapes	3
5	To represent the body from different angles as geometric shapes	3
6	Application of knowledge of the human anatomy in fleshing out the figures.	3
7	Drawing the fashion figure using' fashion proportion principles	3
8	To transform a geometric figure into a nude figure	3
9.	To understand and apply concepts of movement and balance a corresponding changes in placement of Style-lines/guide line different angles of the <i>croqui</i>	3
10.	To understand and represent the shape of the skull as the head turns (front, $\frac{3}{4}$, side & back)	3
11.	Indication of hairstyles and to co-ordinate a look, Indication official features.	6
12.	To explore various front view poses through photographs in order to further skills in drawing the body.	3
13.	To effectively use line, form and proportion to represent a pose	3
14.	Introduction to line drawing of the human figure, capturing the esser of the pose, using a live model for gesture drawings.	6
15.	To portray fall and drape of garments on live models	6
16.	Incorporation of Software, Adobe Illustrator, introduction of basic to	6
17.	Croqui development using Illustrator	9
18.	Tracing the scanned figures,	3
19.	Using Texture, paint contour and blend tools to render hair, skin and facial features.	6
20.	Developing a print ready illustration	6

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop the ability to relate garments to the body through visualization of an appropriate pose.	1 to 20
CO-2	Understand the human anatomy as a three-dimensional form.	

CO-3	Develop skills to represent 3D human form.	1 0 20
CO-4	Develop the ability to relate garments to the body through visualization of an appropriate pose.	

Teaching & Learning Methodology: -

The various methods or tools followed by the faculties to teach the above subject are:

1. Task-based assignments
2. Practice assignments as self-study
3. Illustrated lectures and demonstrations
4. Drawing from live 'models' through 'observe and draw' exercises
5. Review and feedback by faculty

Books Recommended:

1. Drake, Nicholas. Fashion Illustration Today, Thames & Hudson
2. Ireland, Patrick John. Encyclopedia of Fashion Details, Batsford
3. Mohapatra, R.P., Fashion Styles of Ancient India, B.R. Publishing Corporation
4. Seaman. Julian, Fashion Illustration Techniques, B.T. Batsford
5. Abling. Bina, Fashion Sketch Book, Bloomsbury Academic
6. Turnpenny. John, Fashion Design Illustration, Batsford
7. Caket. Colin, Drawing People, Collins & Brown

List of Open Source Software/learning website:

Adobe Illustrator
 Adobe Photoshop

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	-	2	-	2	-	-	-	2	2	-	-	2	2
CO-2	3	2	2	-	-	2	-	-	-	-	-	-	2	2
CO-3	3	-	2	-	2	-	-	-	2	-	-	-	2	2
CO-4	3	-	-	-	2	-	-	-	2	2	-	-	2	2



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Subject Name: History of Indian Costume
Subject Code: 1130373202
Semester: III

Prerequisite:

Art Appreciation.

Objective:

1. To correlate ancient Indian costumes in different geographical and socio-cultural context.
2. To critically analyse salient features of costumes and textiles and to interpret them in the contemporary context.
3. To appreciate Costume as an expression of socio-cultural environment.
4. To study the history of Indian Textiles and its existence in today's context.
5. To examine the range and multiplicity of regional and local Indian dress, coiffure and ornaments in various ages in a variety of styles based on classes and communities.
6. Study of costumes and lifestyles of India based on archaeological finds from Indus Valley Civilisation to post Independence era.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
30	0	2	30	2

Content:

Unit	Contents	Teaching Hours	Weightage
1	Origin & theories of Clothing, Clothing of Indus Valley Civilisation.	3	10
2	Clothing of the Vedic and Post-Vedic eras.	3	10
3	Clothing in the Maurya and Sunga Periods.	3	10
4	Clothing in the Kushana Period.	3	10
5	Clothing in the Satvahana Period.	3	10
6	Clothing in the Gupta Period.	3	10
7	Clothing in the Mughal Empire.	3	10
8	Clothing in the Rajput Empire.	3	10
9	Clothing under the Nizams of Hyderabad.	3	10
10	Clothing during British Raj / Colonial Rule in India.	3	10

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	To develop an understanding of history and the timeline of costumes in the context of present-day apparel.	
CO-2	To develop an understanding of textiles' history, processes, and its existence.	

CO-3	To develop an Understanding in a holistic approach the concept of the 'Fashion Cycle' and the reason of styles from history being repeated till today.	1 to 10
CO-4	To be able to critically analyze salient features of costumes and textiles and to interpret them in the contemporary context.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Lectures, Presentations,
2. Movies (Period films), documentaries
3. Historical articles published in Magazines,
4. Visits to costume & textile museums.

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. Biswas.A, Indian Costumes.
2. Sahay Sachidanand, Indian Costume Coiffure and Ornament.
3. Mohapatra R.P., Fashion Styles of Ancient India.
4. Kumar Ritu, The Costumes and Textiles of Royal India.

List of Open Source Software/learning website:

bitanica.com
worldhistory.org

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO1 1	PO 12	PS O1	PS O2
CO-1	3	1	1	1	1	-	-	-	-	-	-	1	1	2
CO-2	3	2	2	2	1	-	-	-	-	-	-	2	1	1

CO-3	3	1	2	2	3	-	-	-	-	-	-	1	1	2
CO-4	3	2	1	1	2	-	-	-	-	-	-	1	2	1



SILVER OAK UNIVERSITY

Institute Name – Silver Oak Institute of Design

Programme Name: Fashion & Textile Design

Course Name: Fashion Studies

Course Code: 1130373203

Semester: III

Prerequisite:

Elements and Principles of Design

Objective:

7. Nature of Aesthetic experience and its effects on the body and mind.
8. To observation and analyze factors that can influence trends.
9. Concepts of Elements and principles of Design and its application to Fashion.
10. Concepts on design details- colours materials, shapes, forms, detailing etc.
11. Identify apparel categories and their guidelines.
12. Familiarise with different types of design details.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
30	0	0	30	2

Content:

Unit	Contents	Teaching Hours	Weightage
1	Elements and Principles of Design	3	10
2	Understanding the concepts of Aesthetics.	3	10
3	Aesthetics and its application in fashion	3	10
4	The role of aesthetics in Design and Environment Sensory factors affecting aesthetics	3	10
5	Design detail, terminology, variations, and applications Details and specifications with reference to apparel.	3	10
6	Understanding of consumer behavior Consumer Segmentation in fashion Psychographics & Demographics	3	10
7	Apparel classifications in terms of gender, age, styling, occasion and pricing	3	10
8	Fashion forecasting and Business of Fashion	3	10
9	Trends spotting	3	10
10	Process of Fashion forecasting	3	10

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop skills for understanding the interpretation and application of the elements and principles of Design.	1 to 10
CO-2	Develop analytical skills towards understanding of design	
CO-3	Develop skills for understanding of t e r m i n o l o g i e s , Apparel classifications and market segmentation.	
CO-4	Identify and analyze the emerging trends and apply the same in forecasting Course Contents.	

Teaching & Learning Methodology: -

The various methods or tools followed by the faculties to teach the above subject are:

1. Lectures, Presentations,
2. Task-bound assignments
3. Learning Diaries-to be maintained throughout the semester
4. Market Survey and Research
5. Group discussions

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. Promostyl, Promostyl
2. Collezioni, Logos Publishing
3. Vogue, Condé Nast
4. Pantone shade card, Pantone LLC
5. Fashion Newsletter, Various

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO-1	3	2	2	-	2	2	-	-	2	-	-	-	2	2
CO-2	3	2	2	2	2	2	-	-	-	2	-	-	2	2
CO-3	3	2	-	-	2	-	-	-	2	2	-	-	2	2
CO-4	3	2	2	-	-	2	-	-	2	2	-	-	2	2



SILVER OAK UNIVERSITY

Silver Oak Institute of Design

Bachelor of Fashion & Textile Design

Course Name: Textile Studies - 1

Course Code: 1130373204

Semester: 3

Prerequisite:

1. Material Studies

Objective:

13. Identification of fibres
14. Yarn Count
15. Identification of fabrics (yarns construction)
16. Identification of different finishing processes
17. Utilization of the textile material towards fashion needs.
18. To understand the concept of fabric processing and finishing

Teaching and Examination Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
30	0	0	30	2

Content:

Unit	Topics	Teaching Hours
1	Introduction, Textile the raw materials for fashion, Fibre, Filament, Yarn, Textile, End uses of various textiles.	3
2	Classification, Natural–vegetable, animal and mineral Manufactured and synthetic	3
3	Essential properties, Performance properties Aesthetics, Durability, Comfort & Safety.	3
4	Natural Fibres-Cellulosic types, properties and end uses, Natural Fibres :Protein, Manmade and synthetic fibres	3
5	Fibre Testing	3
6	Yarns, Opening, carding, blending, doubling, combing, drawing, and spinning. spun, filament Yarn count, Direction of twist(S & Z), single and ply, woolen and worsted, Bulkyarns, Textured: Knife edge, false twist, stuffer box, air jet, , Novelty: slub, spiral, ratinie, Knot, loop, boucle	3
7	Introduction to Fabric Construction, different methods of fabric construction from fibres, yarns etc. Parts of the loom & preparation for Weaving.	3
8	Weaving,	3
9	Knitting,	3
10	Non Wovens	3

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Identify various fibers, yarns and fabric types, their properties and end uses.	1 to 10
CO-2	Recognize the terminology of Textiles in commercial use	
CO-3	Develop an understanding of the importance of the Textile Industry, and its products & its various segments.	
CO-4	Identify how fibers, yarns, fabrics are produced & its various construction procedures.	

Teaching & Learning Methodology: -

The various methods or tools followed by the faculties to teach the above subject are:

6. Lectures
7. Task-bound assignments
8. Collection and analysis of fabric swatches
9. Visit to a process house

List of Tutorials/Experiments:

1. Burning test for fiber identification

Books Recommended:

8. Joseph J. Pizzuto, Fabric Science, Fairchild Books 2009
9. Marjory Joseph, Fibre Science, Holt, Rinehart and Winston 1977

List of Open Source Software/learning website:

<https://nptel.ac.in/courses/116102026>

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO9	PO1 0	PO11	PO1 2	PSO 1	PSO 2
CO-1	3	3	3	-	3	2	1	1	-	3	3	3	3	3
CO-2	3	-	-	-	-	1	3	2	-	3	3	2	3	3
CO-3	3	3	3	3	3	2	-	-	3	3	3	3	3	3
CO-4	3	3	3	3	3	3	-	-	3	3	3	3	3	3



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Subject Name: Draping I
Subject Code: 1130373205
Semester: III

Prerequisite:

N.A.

Objective:

1. To study the garment in relation to the body and its structure.
2. To be able to drape and manipulate the fabric to achieve the desired fit and style
3. To be able to visualise and create three dimensional patterns directly on the dress form
4. To understand different type of Fabrics and their drapability.
5. To translate the drape into a paper pattern for production.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	0	60	60	2

Content:

Unit No.	Contents	Teaching Hours
1	Introduction to Draping,	3

2	Interpretation of given design sketch into pattern/design and pattern innovation	6
3	Basic bodice -Front & Back	18
4	Dart manipulation, 2 dart manipulation (F& B)	12
5	Single Dart Manipulation anythree, EG: Neckline/French/ flange/ CF etc.	12
6	Dart Conversion, Pleats/ tucks/ gathers	9
7	Using Stripe Fabric to understand mitering	6
8	Basic Skirt Front &Back	6
9	Skirt Variations, Gathered, A-Line, Flare, Pleated, Paneled or Gored	12
10	Collars, Mandarin, Convertible & Peter-Pan	6

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop skills for handling of different fabrics according to design	1 to 10
CO-2	Develop three - dimensional patterns on the dress form.	
CO-3	Analyze the choice of fabric for specific application.	
CO-4	Create three - dimensional patterns on the dress form	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Lectures, Presentations
2. Task-based assignments
3. Extent of exploration
4. Review & feedback by faculty

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. Armstrong, Helen Joseph, Pattern Making for Fashion Design
2. Armstrong, Helen Joseph, Draping for Apparel Design, New York
3. Natalie Bray, Dress Fitting, Black Well Publications
4. Connie Amaden –Crawford. The Art of Fashion Draping
5. Hidle Jaffe, Nurie Relis. Draping for Fashion Design. Singapore

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO9	PO1 0	PO11	PO1 2	PSO 1	PSO 2
CO-1	3	1	1	1	1	-	-	-	-	-	-	1	1	2
CO-2	3	2	1	3	3	-	-	-	-	-	-	1	1	1
CO-3	3	2	2	2	3	-	-	-	-	-	-	1	1	2
CO-4	3	2	3	1	1	-	-	-	-	-	-	1	1	1



SILVER OAK UNIVERSITY

Institute Name – Silver Oak Institute of Design

Programme Name: Fashion & Textile Design

Subject Name: Pattern making & Garment Construction I

Subject Code: 1130373206

Semester: III

Prerequisite:

Geometry.

Objective:

1. Develop proficiency on the lock stitch machine and its applications.
2. Learn and apply utility of various components in a garment.
3. Understand the utility of different techniques used for garment construction which can also be used as design features.
4. Handling of fabric while cutting and stitching.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	0	120	120	4

Content:

Unit	Contents	Teaching Hours	Weightage
1	Orientation of lock stitch machine, threading practice and stitch practice on muslin fabric.	14	7.6
2	Hand stitches, Basting, running, slip, blind hem, buttonhole, etc.	6	6.6
3	Fasteners/Closures, Button, hook, Velcro	3	6.6
4	Basic Seams - Hem finished, Plain Seam (opened seam), Plain Seam (closed seam), Plain Seam (closed seam with double top stitch) French seam, Flat-felled seam, Lapped seam, Chanel seam, Hong-Kong seam, Bias-Bound seam.	6	6.6
5	Seam finishes, Pink & Stitch, Hong Kong, Tailor's edge (turn & stitched), Eased, Taped, Slot, Lapped, Bias bound etc	12	6.6
6	Hem finishes, Baby, Doubletop stitch, rolled	6	6.6
7	Controlling fullness, Darts, pleats, gathers, tucks, godet, flare, ruffles etc	6	6.6
8	Open edge finishes, Bias Facing, binding, Slits and concealed zipper	6	6.6
9	Garment Analysis, understand the utility of different techniques used for garment construction	3	6.6

10	Measuring Techniques	3	6.6
11	Basic Bodice draft and test-fits	6	6.6
12	Dart Manipulations, shifting darts to various areas on the basic converting darts into gathers, tucks and pleats, creating asymmetrical converting darts into panels and yokes.	18	6.6
13	Basic SleeveBlock, puff, Bishop, Flared and Cartwheel, leg-o-mutton (fitted), shirt, Tulip and Cap sleeve	9	6.6
14	Skirt block and its variations, 'A' line/ flared, gathered, pleated skirt, yoke, midriff/asymmetric and paneled skirt, creating godet and gore skirt, circular skirt, peg, flounced and tiered skirt,	18	6.6
15	Collar designs and neckline finishes, peter-pan, Bertha and sailor variations, Mandarin and shirt collar variations.,	9	6.6

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop Skills to handle the fabric.	1 to 10
CO-2	Develop basic draft slopers according to dress form	
CO-3	Develop Skills to handle the sewing machine.	
CO-4	Development of an original design through the flat pattern method.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Explanations and demonstrations
2. Lab assignments
3. Test fits and stitched toile's
4. Reference materials to be given as and when required.

5. Individual presentations and discussions

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. Armstrong, Helen Joseph - Pattern making for Fashion Design. (Harper & Row publications.)
2. Metric Pattern Cutting - Aldrich Winifred
3. Kopp, E., Rolf, V., and Zelin - How to Draft Basic Patterns
4. Sewing for Fashion Design- Nurie Relis, Gail Strauss
5. Basics: Fashion Design 03- Construction-Anette Fischer

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
CO-1	3	1	1	1	1	-	-	-	-	-	-	1	1	2
CO-2	3	2	3	2	3	-	-	-	-	-	-	1	1	1
CO-3	3	2	2	2	3	-	-	-	-	-	-	1	1	2
CO-4	3	2	1	1	2	-	-	-	-	-	-	1	1	1



SILVER OAK UNIVERSITY

Silver Oak Institute of Design

Programme Name: Fashion & Textile Design

Course Name: Surface Design Technique - 1

Course Code: 1130373207

Semester: 3

Prerequisite:

Basic understanding of textile materials and design principles.

Objective:

19. To harness indigenous and available resources, skill, materials and techniques for contemporary adaptations and applications.
20. Appreciation, Visualization and Application of hand crafted technique and processes towards innovative fashion products,

- embellishments, and value addition
21. To appreciate traditional embroidered textiles of India vis-à-vis their material, form, texture, colour and relate it to art, architecture, patronage trade and other influences.

Teaching and Examination Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	0	60	60	2

Content:

Unit No.	Contents	Teaching Hours
1	Running Stitch, Back stitch, Chain Stitch	3
2	Open chain Stitch, Stem Stitch, Blanket Stitch	3
3	Cross Stitch, Herringbone Stitch, Fishbone Stitch	3
4	French Knot, Bullian Knot	6
5	Fly stitch, Satin Stitch and its variations	3
6	Various traditional embroidery techeniques :Kasuti, Sujani	3
7	Phulkari, ChambaRumal	6
8	Kashida, Zalakdozi, zardozi	6
9	Chikankari, Lambadi	6
10	Soof, Kharek, Rabari, Mutwa, Jat, Ahir	6

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop Understanding of surface design and techniques.	1 to 10
CO-2	Develop skills for handling of different fabrics and tools.	
CO-3	Awareness and understanding of handcrafted processes & materials	
CO-4	Articulation and communication through study and documentation.	

Teaching & Learning Methodology: -

The various methods or tools followed by the faculties to teach the above subject are:

10. Lecture/demonstration
11. Task based assignment.
12. Hands-on explorations
13. Slides & visuals of Textiles.

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. Richard Proctor, "Surface Design for Fabric", University of Washington Press, 1995
2. Holly Brackmann , "The Surface Designer's Handbook: Dyeing, Printing, Painting, and Creating Resists on Fabric", Interweave, 2006

List of Open Source Software/learning website:

1. **Software:** GIMP (image manipulation), Inkscape (vector graphics)

2. **Websites:** TextileArtist.org (tutorials and articles), Craftsy (online classes), YouTube tutorials on textile dyeing and printing techniques

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
CO-1	3	3	3	3	-	2	3	-	3	3	3	2	3	3
CO-2	-	2	3	2	-	-	-	-	-	3	3	3	3	3
CO-3	3	3	-	3	-	-	-	-	-	-	3	3	3	3
CO-4	-	-	-	-	3	3	3	-	2	-	-	-	3	3



SILVER OAK UNIVERSITY

Silver Oak Institute of Design

Programme Name: Fashion & Textile Design

Course Name: Design Process - 1

Course Code: 1130373208

Semester: 3

Prerequisite:

Basic understanding of design principles, familiarity with design software/tools.

Objective:

22. To conceptualize and implement design process to create a collection reflecting the technical accomplishments.
23. To apply one's learning of the basic inputs in the context of fashion.
24. To develop ability to interpret, articulate and represent emotive qualities in visual image as well as garments through application of elements and principles of design.

Teaching and Examination Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	0	90	90	3

Content:

Unit	Contents	Teaching Hours
1	Introduction to Design Process	3
2	Development of theme, Brain Storming, research	6
3	Boards development – color board, mood board, Client board/design brief, silhouette board	6
4	Market survey & fabric board development	6
5	Ideations & development of concepts	30
6	Review group discussion & finalization of range	6
7	Final Illustrations of range	30
8	Final presentation	3

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Articulation through language and keywords	1 to 10
CO-2	Research methodology for a design process	
CO-3	Design analysis and critique	
CO-4	Creating needs/wants/desires and the role of vanity in fashion	

Teaching & Learning Methodology: -

The various methods or tools followed by the faculties to teach the above subject are:

14. Illustrated Presentations
15. Task-bound assignments
16. Market Survey and Research
17. Group discussions
18. Learning Diaries-to be maintained through the semester

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. "Fashion Design Course: Principles, Practice, and Techniques" by Steven Faerm
2. "Patternmaking for Fashion Design" by Helen Joseph-Armstrong

List of Open Source Software/learning website:

Websites: Skillshare, Textile Study Center (online resources), Fashionista (tutorials and articles)

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
CO-1	3	3	3	3	-	3	3	1	2	3	3	2	3	2
CO-2	3	3	3	3	-	3	3	2	1	3	3	2	3	2
CO-3	3	-	-	-	-	-	-	3	-	3	3	3	3	3
CO-4	3	3	3	3	-	-	3	2	3	3	3	-	2	1



Bachelor of Fashion & Textile Design

Course Name: Textile Studies - 2

Course Code: 1130373209

Semester: 4

Prerequisite:

1. Textile Studies 1 or equivalent experience

Objective:

25. Introduce students with different dyeing and printing techniques.
26. Enable students to develop an understanding for importance of finishes on fabrics.

Teaching and Examination Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
30	0	0	30	2

Content:

Unit No.	Contents	Teaching Hours
1	Chemical Processing of Textiles – Introduction, Impurities	1
2	Preparatory Processes in Textiles: Singeing, De-sizing, Scouring, Bleaching, Mercerization, Tentering	2

3	Dyeing in Textiles – Introduction, Types of Dyes: Vegetable Dyes, Animal Dyes, Mineral Dyes, Vat Dyes, Azoic/Naphthol Dyes, Direct Dyes, Sulfur Dyes, Reactive Dyes, Disperse Dyes, Basic Dyes, Acid Dyes, Metallic Dyes, Pigments	5
4	Dyeing Methods: Batch Dyeing, Continuous Dyeing, Semi-continuous Dyeing, Dope Dyeing, Stock Dyeing, Yarn Dyeing, Skein Dyeing, Package Dyeing, Beam Dyeing, Piece Dyeing, Garment Dyeing, Pad Dyeing, Cross Dyeing, Union Dyeing	5
5	Textile Printing: Stencil Printing, hand Block Printing, Hand Screen Printing, Flat Bed Screen Printing, Roller Printing, Rotary Screen Printing, Heat Transfer Printing	4
6	Styles of Printing: Direct Printing, Discharge Printing, Resist Printing, Pigment Prints, Blotch Prints, Flock Printing, Burn-out Prints, Duplex Prints, Engineered Prints, Warp Prints	5
7	Textile Finishes, Objectives, Classification of Textile Finishes: Aesthetic Finishes, Functional Finishes, Mechanical Finishes, Chemical Finishes, Permanent Finishes, Durable Finishes, Semi Durable Finishes, Temporary Finishes	3
8	Textile Finishes: Calendering, Napping, Emerizing, Parchmentising, Durable Press, Shrinkage Control Finishes, Stain Repellent Finishes, Water Repellent Finishes, Anti-Microbial Finishes, Insect & Moth Control Finishes, Durable Flame Retardant, Chemical Washes, Enzyme Washes, Stone Wash, Micro Encapsulated Finishes.	5

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop an understanding of preparatory processes in textiles.	1 to 8
CO-2	Develop an understanding of different methods of dyeing and	
CO-3	Show deep learning of Textile Finishes.	
CO-4	Interpret the modern advancements in textile dyeing, printing, finishing and other processes.	

Teaching & Learning Methodology: -

The various methods or tools followed by the faculties to teach the above subject are:

19. Classroom Explanations.
20. Tutorials for certain creative implementations of the exercises.
21. Experiencing and practicing in real/actual environment.
22. Group tasks, team work.
23. Visit to printing unit.

List of Tutorials/Experiments:

1. Vegetable dye
2. Direct dye
3. Block print
4. Screen print
5. Heat transfer print

Books Recommended:

10. J. L. Smith, "Textile Processing, Printing, Dyeing, Finishing", Abhishek Publications, 2019
11. John Foulds, "Dyeing and Printing", Practical Action Publishing, 1990
12. W S Murphy, "Textile Finishing", Abhishek Publications, 2007

List of Open Source Software/learning website:

1. Textile Institute (courses and webinars),
2. Textile Network (articles on textile innovations),
3. Textile World (industry news and insights)

CO-PO-PSO Matrix:

Co. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-	3	3	3	-	3	2	1	1	-	3	3	3	3	3
CO-	3	-	-	-	-	1	3	2	-	3	3	2	3	3
CO-	3	3	3	3	3	2	-	-	3	3	3	3	3	3
CO-	3	3	3	3	3	3	-	-	3	3	3	3	3	3



SILVER OAK UNIVERSITY

Institute Name – Silver Oak Institute of Design (13)

Programme Name: Fashion & Textile Design (037)

Subject Name: History of World Costume

Subject Code: 1130373210

Semester: IV

Prerequisite:

Art History.

Objective:

1. To do a comparative study between various features and design elements during different civilisations and find a co-relation in art, architecture, design and costume of that period.
2. To initiate the students into the contextual basis of study of art, design and costume history during different civilisations/era.
3. To understand the reasons of costume evolution from necessity–driven basics to flamboyant styles.
4. To design contemporary/contextual outfits based on inspiration of period costumes.
5. To be able to identify costumes in the context of time and culture.
6. To develop the ability to recognise the style and inspiration of costumes.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
30	0	0	30	2

Content:

Unit	Contents	Teaching Hours	Weightage
1	Introduction to costume history	3	10
2	Mesopotamian, Assyrian, Sumerian, Babylonian clothing	3	10

3	Egyptian culture, clothing, Hair dresses & jewelry	3	10
4	Greek culture, clothing, Hairdresses & jewelry	3	10
5	Roman culture, clothing, Hairdresses & jewelry	3	10
6	Early European & Byzantine culture, clothing, Hairdresses & jewelry,	3	10
7	Medieval European culture, clothing, Hairdresses & jewelry	3	10
8	Renaissance culture, clothing, Hairdresses & jewelry	3	10
9	Elizabethan fashion, Cavalier costume, Restoration costume, Georgian costume,	3	10
10	Directoire costume, Romantic costume, crinoline costume, Fin de Siecle costume	3	10

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	To develop an understanding of history and the timeline of costumes in the context of present-day apparel.	1 to 10
CO-2	To develop an understanding of textiles history, processes, and its existence.	
CO-3	To develop an Understanding in a holistic approach the concept of the 'Fashion Cycle' and the reason of styles from history being repeated till today.	
CO-4	To be able to critically analyze salient features of costumes and textiles and to interpret them in the contemporary context.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Lectures, Presentations,

2. Movies (Period films), documentaries
3. Historical articles published in newspapers,
4. visits to costumes & textiles museums.

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. 400 Years of Fashion – Rothstein Natalie, Publisher: Victoria & Albert Museum.
2. History of 20th century fashion–Elizabeth Ewing Publisher: Costume & Fashion Press
3. History of costume-Black & Garland, Publisher : Orbis London
4. History of Art–H.W. Janson, Publisher: Prentice Hall of INC
5. A history of costume in the west-Francois Boucher

List of Open Source Software/learning website:

britannica.com
worldhistory.org

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
CO-1	3	1	1	1	1	-	-	-	-	-	-	1	1	2
CO-2	3	2	3	2	3	-	-	-	-	-	-	1	1	1
CO-3	3	2	2	2	3	-	-	-	-	-	-	1	1	2
CO-4	3	2	1	1	2	-	-	-	-	-	-	1	1	1



SILVER OAK UNIVERSITY

Institute Name – Silver Oak Institute of Design

Programme Name: Fashion & Textile Design

Course Name: Fashion Marketing

Course Code: 1130373211

Semester: IV

Prerequisite:

NA

Objective:

1. To familiarise them with the distinctive aspects between fashion and generic marketing
2. To enable students to gain better understanding on markets and marketing concepts.
3. To enable creation of market-oriented designs
4. To familiarise them with research methods
5. To enable students to classify markets.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
30	0	0	30	2

Content:

Unit	Contents	Teaching Hours	Weightage
1	Overview of Fashion sector and marketing. (interactive session).	3	10
2	<ul style="list-style-type: none"> • Introduction to Marketing • Core Concepts of Marketing • Fashion Marketing Environment • Internal & External Environment Market • Trends and Influences 	3	10
3	<ul style="list-style-type: none"> • Marketing Process • Market Segmentation • Market Targeting • Marketing Positioning 	3	10
4	<ul style="list-style-type: none"> • Product Attributes • Different product Levels • Fashion Products • Product lifecycle • Fashion Lifecycle 	3	10
5	Pricing (Objectives, Methods, and Strategies)	3	10
6	Promotion	3	10
7	<ul style="list-style-type: none"> • Channels • Marketing Intermediaries • Logistics and supply chain • Service marketing • Retailing & design services 	3	10
8	<ul style="list-style-type: none"> • Consumer behavior • Consumer buying process 	3	10
9	<ul style="list-style-type: none"> • Need • Types of data • Research process • Research methods • Analysis 	3	10
10	<ul style="list-style-type: none"> • Perceived values • Brand evaluation 	3	10

Course Outcome:

Sr. No.	CO statement	Unit No
----------------	---------------------	----------------

CO-1	Apply learning to marketing concepts	1 to 10
CO-2	Identify segmentation and target markets & consumer behavior	
CO-3	Classify various product, price, promotion and distribution strategies	
CO-4	Trace marketing research process	

Teaching & Learning Methodology: -

The various methods or tools followed by the faculties to teach the above subject are:

- Lectures, Presentations,
- Case lead & study
- Group discussion
- Market Survey

List of Tutorials/Experiments:

Books Recommended:

13. Bohdanowicz, Janet., Clamb, Liz. Fashion Marketing, · Routledge (Taylor & Francis Group)
14. Kotler, P. Principles of Marketing, Pearson
15. Schiffmann., Kanuk. Consumer Behaviour, Pearson

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO-1	3	1	1	1	3	1	1	1	1	1	1	1	1	1
CO-2	1	2	2	1	1	1	3	1	1	1	1	1	1	1
CO-3	2	2	2	1	1	1	2	1	1	1	1	1	1	1
CO-4	1	3	1	1	1	1	1	1	1	3	1	1	1	1



SILVER OAK UNIVERSITY

Institute Name – Silver Oak Institute of Design

Programme Name: Fashion & Textile Design

CourseName: Fashion Illustration - II

Course Code: 1130373212

Semester: IV

Prerequisite:

Fashion Illustration - I

Objective:

1. To develop advanced skills in Fashion model drawing
2. To develop a uniquely, individual style of illustration to integrate design, style and detailing.
3. To use principles of garment drawing -drape and details for design representation.
4. Understanding of fabric qualities for accurate representation of design
5. Development of concept through design development process to final range

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	0	90	90	3

Content:

Unit	Contents	Teaching Hours
1	Advanced Fashion Model Drawing to develop individualized, signature style of Illustration.	6
2	Illustration styles in 20 th century, individual exploration spontaneity, line quality etc.	3
3	Experiment with different kinds of art paper and co-relate medium used,	3
4	Stylization of the croqui and different medium exploration	12
5	Garment categories & draping of garments on croquis,	3
6	Garment details as per categories	6
7	The 'editorial' method of fabric rendering (printed cotton, chiffon, velvet, wool, denim, knit)	18
8	Introduction to Flat working drawing	6
9	Developing mood board/inspiration board, client profile boards, storyboard based on forecast of the next season	6
10	Concept to finished product	12
11	Using Adobe Illustrator and photoshop to develop advanced illustration techniques.	15
12	Exhibiting work through suitable layouts, graphics and utilization of different presentation techniques	3

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Create a specific 'look' through illustration	1 to 12
CO-2	Create a range with Clear indication of garment details.	
CO-3	Develop skills in the use of <i>Adobe Illustrator</i> in Fashion	

CO-4	Develop concept through design development process to final range
-------------	---

\Teaching & Learning Methodology: -

The various methods or tools followed by the faculties to teach the above subject are:

1. Visual aids e.g., slides, published work.
2. Demonstration of drawing and rendering
3. Co-relating computer inputs to hand-rendered techniques
4. Learning through practice assignments

Books Recommended:

1. Drake, Nicholas. Fashion Illustration Today, Thames & Hudson
2. Borrelli, Laird. Fashion Illustration Now, Thames & Hudson
3. Stipelman, Steven. Fashion Illustration, Fairchild Publications
4. Gersten, Rita. Fashion Art for the Fashion Industry, Fairchild Publications
5. Abling, Bina. Advanced Fashion Sketch Book, Fairchild Publications
6. Barnes, Colin. Fashion Illustration, Batsford
7. Yajima, Isao. Figure Drawing for Fashion I, II, Graphic-Sha Publishing Company

List of Open Source Software/learning website:

Adobe Illustrator.

Adobe Photoshop

CO-PO-PSO Matrix:

Co. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO-1	3	1	2	1	2	1	1	1	2	1	1	1	2	2
CO-2	3	1	2	1	2	1	1	1	2	1	1	1	2	2



1	1	2	1	1	2	2	1	1	2	2
2	2	1	1	1	2	1	1	1	2	2

SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
CourseName: Pattern making & Garment Construction II
Course Code: 1130373213
Semester: IV

Prerequisite:

Pattern Making.

Objective:

1. Develop proficiency on the lockstitch machine and its applications.
2. Learn and apply utility of various components in a garment.
3. Understand the utility of different techniques used for garment construction which can also be used as design features.
4. Handling of fabric while cutting and stitching.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
0	0	120	120	4

Content:

Unit No.	Contents	Teaching Hours

1	a. Front Placket - Seamless, French, Standard, Concealed. b. Sleeve Placket Faced - Continuous, Shirt Diamond.	6
2	Neckline finishes - Bias bound, Shaped facing, Combined.	3
3	Collars - Mandarin, Convertible, Shawl.	6
4	Sleeves - Set-in, puff Cuff applications - Simple, Round, French.	3
5	Zippers - concealed, trouser zipper. Pockets - patch pocket with flap, in-seam pocket.	6
6	Pockets and Flaps - Slashed pocket, Welt pocket and variations.	3
7	Waist bands and its finishes - Straight, Contour waist bands, Faced, Elastic waistband.	6
8	Understanding of torso form, Drafting of the Basic Torso	3
9	Corset and Bra Top Foundation.	
10	Basic Dress - Sheath, Shift pattern and Box - Pattern and test-fit.	9
11	Empire-line Dress pattern and test-fit, Panelled dress pattern and test-fit.	3
12	Tent dress pattern and test-fit. Jumper dress pattern and test-fit.	6
13	Understanding of the difference between, Kimono and dolman sleeve, a basic Kimono pattern, Kimono sleeve with gusset, variations of kimono sleeve, Draft a Dolman sleeve using a kimono sleeve.	12
14	Raglan sleeve, Raglan sleeve with Shoulder dart/with out shoulder dart, variations of Raglan sleeve.	9
15	Basic Trouser - Drafting, making test-fit and final sloper.	3
16	Slack Foundation - Drafting and making test fit.	6
17	Culottes using a skirt sloper & variations - Drafting and making test-fit.	3
18	Pleated, Flared and Baggy trousers - Drafting and making test-fit.	6
19	Low waist & High waisted trousers - Drafting, making test-fit and patterns.	9
20	Contour Pants & variations - Drafting and making test-fit.	6
21	Cowl and Peg trousers - Drafting and making test-fit.	3
22	Shorts, Pedal pushers, Bell Bottom trousers - Drafting and making test-fits.	6

23	Trouser Design Explorations.	3
----	------------------------------	---

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop Skills to handle the fabric.	1 to 24
CO-2	Develop basic draft slopers according to dress form measurements	
CO-3	Students draft basic slopers according to dressform's measurements which is then is used to develop creative designs	
CO-4	Development of an original design through the flat pattern method.	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Explanations and demonstrations
2. Lab assignments
3. Test fits and stitched toile's
4. Reference materials to be given as and when required.
5. Individual presentations and discussions

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. Armstrong, Helen Joseph- Pattern making for Fashion Design.(Harper & Row publications.)
2. Metric Pattern Cutting-Aldrich Winifred.
3. Kopp,E.,Rolf,V.,and Zelin-How to Draft Basic Patterns.
4. Sewing for Fashion Design- Nurie Relis, Gail Strauss.

5. Basics: Fashion Design 03- Construction-Anette Fischer.

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
CO-1	3	1	1	1	1	-	-	-	-	-	-	1	1	2
CO-2	3	2	3	2	3	-	-	-	-	-	-	1	1	1
CO-3	3	2	2	2	3	-	-	-	-	-	-	1	1	2
CO-4	3	2	1	1	2	-	-	-	-	-	-	1	1	1
CO-5	3	2	2	1	3	-	-	-	-	-	-	1	1	1



SILVER OAK UNIVERSITY
Institute Name – Silver Oak Institute of Design
Programme Name: Fashion & Textile Design
Course Name: Draping - II
Course Code: 1130373214
Semester: 4

Prerequisite:

Draping.

Objective:

1. To create Innovative patterns
2. To understand Advanced and Creative concepts of draping
3. To develop one-piece garments
4. To inculcate the concept of volume and folds in relation to fabric type (soft and fluid to firm and heavy)
5. To learn techniques of accurate pinning& marking
6. To translate the drape into a paper pattern for production

Teaching Scheme:

Teaching Scheme

L	T	P	Contact Hours	Credit
0	0	60	60	2

Content:

Unit No.	Contents	Teaching Hours
1	Hip Yoke, Mid ruff Yoke & Shoulder yoke	6
2	Princes' bodice and its variations	6
3	Introduction to peg skirt	3
4	Peg skirt variation	3
5	Torso	6
6	Dresses (Shift, Sheath and Princess dresses and any one dress variation incorporating minimum of 3 features learned till Now)	18
7	Basic trouser and Trouser variations(tapered/gathered/Pegged etc.)	6
8	Cowl neckline & its variations (High Cowl, Low Cowl, Back cowl and underarm cowl)	6
9	Built up neck line	3
10	Shawl collar	3

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Develop skills for handling of different fabrics according to design	
CO-2	Develop three-dimensional patterns on the dress form.	

CO-3	Analyze the choice of fabric for specific application.	1 to 10
CO-4	Create three-dimensional patterns on the dress form	

Teaching & Learning Methodology:

The various methods or tools followed by the faculties to teach the above subject are:

1. Demonstrations
2. Task-based assignments
3. Extent of exploration
4. Review & feedback by faculty

List of Tutorials/Experiments:

Based on particular exercises and the capability of students, creative exercises will be generated by subject expert.

Books Recommended:

1. Armstrong, Helen Joseph, Pattern Making for Fashion Design
2. Armstrong, Helen Joseph, Draping for Apparel Design, New York
3. Natalie Bray, Dress Fitting, Black Well Publications
4. Connie Amaden-Crawford. The Art of Fashion Draping
5. Hidle Jaffe, Nurie Relis. Draping for Fashion Design. Singapore
6. Bina Ablang, Kathleen Maggio. Integrating Draping, Drafting and Drawing(with Patterns).New York: Fairchild

List of Open Source Software/learning website:

N.A.

CO-PO-PSO Matrix:

Co. No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
CO-1	3	1	1	1	1	-	-	-	-	-	-	1	1	2
CO-2	3	2	3	2	3	-	-	-	-	-	-	1	1	1
CO-3	3	2	2	2	3	-	-	-	-	-	-	1	1	2

