

(13)

**Department of Textile Printing, Dyeing and
Finishing**

Table No. (99) Department:Textile Printing, Dyeing and Finishing Department No. (13)
 First Year First Semester

No.	Code No.	Course Title	Number of Weekly Hours			Marks Distribution				Exam Hours
			Lecture	Lesson	Total	Semester Work Marks	Discussion/ Oral	Written	Total	
1	1102	Designing Children fabrics Printing	-	6	6	-	40	-	40	Extended
2	1101	Textiles Printing Design Basics	1	3	4	-	60	-	60	Extended
3	1204	Fibers Nature	4	-	4	30	30	90	150	2
4	1109	Fibers Chemistry	4	2	6	30	30	90	150	2
5	1113	Textile Printing	-	4	4	-	40	-	40	Extended
6	1501	Chemistry	1	2	3	15	15	45	75	2
7	1502	Nature	1	2	3	15	15	45	75	2
8	1405	Geometric Perspective	1	3	4	20	20	60	100	4
9	1602	Languages	2	-	2	10	10	30	50	2
Total Weekly Hours			14	22	36	Total Marks				740

Table No. (100) Department:Textile Printing, Dyeing and Finishing Department No. (13)
 First Year Second Semester

No.	Code No.	Course Title	Number of Weekly Hours			Marks Distribution				Exam Hours
			Lecture	Lesson	Total	Semester Work Marks	Discussion/ Oral	Written	Total	
1	1101	Textiles Printing Design Basics	1	3	4	-	60	-	60	Discussion
2	1102	Designing Children Fabrics Printing	-	6	6	-	90	-	90	Discussion
3	1114	Cellulosic Fabrics Preparations	2	2	4	20	20	60	100	2
4	1116	History of Textile Printing	2	-	2	20	20	60	100	2
5	1205	Threads Production	4	-	4	20	20	60	100	2
6	1113	Textile Printing	-	4	4	-	60	-	60	Discussion
7	1403	Computer	1	3	4	20	20	60	100	2
8	1503	Mathematics	2	-	2	10	10	30	50	2
9	10-1306	Still Nature	-	4	4	-	100	-	100	Discussion
10	11-1603	History of Arts	2	-	2	20	-	30	50	2
Total weekly Hours			14	22	36	Total Marks				810

Table No. (101) Department:Textile Printing, Dyeing and Finishing Department No. (13)
 Second Year First Semester

No	Code No	Course Title	Number of Weekly Hours			Marks Distribution				Exam Hours
			Lecture	Lesson	Total	Semester Work Marks	Discussion/ Oral	Written	Total	
1	2103	Designing Women Fabrics Printing	-	6	6	-	60	-	60	Extended
2	2110	Dyes Chemistry	2	4	6	30	30	90	150	2
3	2115	Protein Fabrics Preparations	2	2	4	20	20	60	100	2
4	2206	Weaving Structures	2	2	4	20	20	60	100	2
5	2113	Textiles Printing	-	4	4	-	40	-	40	Extended
6	2502	Nature	1	2	3	15	15	45	75	2
7	2501	Chemistry	1	2	3	15	15	45	75	2
8	11-2603	History of Arts	2	-	2	10	10	30	50	2
9	2407	Planning and Production Management	2	-	2	10	10	30	50	2
10	2505	Feasibility Studies	2	-	2	10	10	30	50	2
Total Weekly Hours			14	22	36	Total Marks				755

Table No. (102) Department:Textile Printing, Dyeing and Finishing Department No. (13)
 Second Year Second Semester

No.	Code No.	Course Title	Number of Weekly Hours			Marks Distribution				Exam Hours
			Lecture	Lesson	Total	Semester Work Marks	Discussion/ Oral	Written	Total	
1	2103	Designing Women Fabrics Printing	-	6	6	-	90	-	90	Discussion
2	2111	Dyes Technology	3	3	6	30	30	90	150	2
3	2112	Printing Technology	4	-	4	20	20	60	100	2
4	2201	Materials Properties	2	2	4	20	20	60	100	2
5	2113	Textile Printing	-	4	4	-	60	-	60	Discussion
6	2403	Computer	1	3	4	20	20	60	100	2
7	2503	Mathematics	2	-	2	10	10	30	50	2
8	10-2306	Still Nature	-	4	4	-	100	-	100	Discussion
9	2607	Languges	2	-	2	10	10	30	50	2
Total Weekly Hours			14	22	36	Total Marks				800

Table No. (103) Department:Textile Printing, Dyeing and Finishing Department No. (13)

Third Year First Semester

No	Code No	Course Title	Number of Weekly Hours			Marks Distribution				Exam Hours
			Lecture	Lesson	Total	Semester Work Marks	Discussion/ Oral	Written	Total	
1	3104	Designing Furniture Printing	-	8	8	-	80	-	80	Extended
2	3111	Dyeing Technology	2	4	6	30	30	60	150	2
3	3106	Textile Printing Machines	2	-	2	10	10	30	50	2
4	3202	Quality Control and Examination	2	2	4	15	15	45	75	2
5	3113	Textile Printing	-	4	4	-	70	-	70	Extended
6	3704	Ecology	2	4	6	-	30	90	150	2
7	3406	Electrical Engineering	2	-	2	10	10	30	50	2
8	3604	Criticism and Art Appreciation	2	-	2	10	10	30	50	2
9	3605	Aesthetics	2	-	2	10	10	30	50	2
Total Weekly Hours			14	22	36	Total Marks				725

Table No. (104) Department:Textile Printing, Dyeing and Finishing Department No. (13)

Third Year Second Semester

No.	Code No.	Course Title	Number of Weekly Hours			Marks Distribution				Exam Hours
			Lecture	Lesson	Total	Semester Work Marks	Discussion/ Oral	Written	Total	
1	3104	Designing Furniture Printing	-	8	8	-	120	-	120	Discussion
2	3112	Cellulosic Fabrics Printings Technology	4	-	4	20	20	60	100	2
3	3108	Final Finishing of Textiles	2	2	4	20	20	60	100	2
4	3201	Materials Properties	3	1	4	20	20	60	100	2
5	3113	Textile Printing	-	4	4	-	105	-	105	Discussion
6	3403	Computer	1	3	4	20	20	60	100	2
7	3602	Languages	2	-	2	10	10	30	50	2
8	10-3307	Living Nature	-	4	4	-	100	-	100	Discussion
9	3603	History of Arts	2	-	2	10	10	30	50	2
Total Weekly Hours			14	22	36	Total Marks				825

Table No. (105) Department:Textile Printing, Dyeing and Finishing Department No. (13)
 Third Year First Semester

No.	Code No.	Course Title	Number of Weekly Hours			Marks Distribution				Exam Hours
			Lecture	Lesson	Total	Semester Work Marks	Discussion/ Oral	Written	Total	
1	4105	Designing Printed Textile Pendants	-	10	10	-	250	-	250	Discussion
2	4111	Dyeing Technology	2	4	6	30	30	90	150	2
3	4112	Different and Protein Fabrics Printing Technology	2	4	6	30	30	90	150	2
4	4203	Marketing Management and Systems	2	-	2	10	10	30	50	2
5	4707	Ecology	2	4	6	30	30	90	150	2
6	4604	Criticism and Art Appreciation	2	-	2	10	10	30	50	2
7	4605	Aesthetics	2	-	2	10	10	30	50	2
8	4705	Introduction to Psychology	2	-	2	10	10	30	50	2
Total Weekly Hours			14	22	36	Total Marks				900

Table No. (106) Department:Textile Printing, Dyeing and Finishing Department No. (13)
 Fourth Year Second Semester

No.	Code No.	Course Title	Number of Weekly Hours			Marks Distribution				Exam Hours
			Lecture	Lesson	Total	Semester Work Marks	Discussion/ Oral	Written	Total	
1	4108	Final Finishing of Textiles	3	3	6	30	30	90	150	2
2	4107	Dyeing and Finishing Machines	2	-	2	10	10	30	50	2
3	4202	Quality Control and Examination	2	2	4	20	20	60	100	2
4	4117	Textile Printing Design Economics	2	-	2	10	10	30	50	2
5	4118	Graduation Project	-	10	10	-	250	-	250	Discussion
6	4603	Computer	1	3	4	20	20	60	100	2
7	4602	Languages	2	-	2	10	10	30	50	2
8	10-4307	Living Nature	-	4	4	-	100	-	100	Discussion
9	11-4603	History of arts	2	-	2	10	10	30	50	2
Total Weekly Hours						Total Marks				900

(13) Department Of Textile Printing, Dyeing and Finishing

13- 1101 Textile Printing Design Basics

Principles of using necessary and modern main techniques for the textile printing designer – as well as technical tools and materials in weekly experiments – Training on making color maps to design textile printing – applying on some students' projects in Designing.

13- 1102 Designing Children Fabrics Printing

Identifying artistic elements suitable for children fabrics designs (clothes-furnishing) in different ages – innovating decorative units and artistic formations derived from such elements –learning principles of textile printing design of printed products of child garments – furnishing designs and other various usages for the child.

13- 2103 Designing Women Fabrics Printing

Using natural and geometric elements individually and collectively in the designs of printed women and men fabrics with all their different kinds and purposes (dresses, blouse, scarf, shirt, sport clothes, ties, tissues, ...etc.) for different occasions and times and that is for extended printing products or one-piece printing.

13- 3104 Designing Furniture Fabrics Printing

Studying and analyzing elements of various Egyptian National Heritage Arts and deriving designs inspired by them with respect to requirements of furniture fabrics for the different kinds of furnishing shall be taken into consideration – décor accessories and other domestic usages (mattresses, towels, bath kits, kitchen kit, ... etc.) – designs of the harmonious group of a certain place.

13- 4112 Protein and Synthetic Fabrics Printing Technology

Methods of printing protein fabrics include wool and natural silk with various dyes – a theory for fixing used dyes and their properties – methods of fixing printings on fabrics – washing operations – printing synthetic fibers include: polyester – polyamide – acrylic by various dyes – thermal fixation – printing fabrics mixed with natural or other synthetic fibers which include: Printing fabrics mixed with wool / cotton / polyester, wool / acrylic – methods of different printings on synthetic fabrics and their mixtures which include direct printing, removing and immunity.

13- 1113 Textiles Printing (1)

Different styles and methods that can be used in textile printing –correlating and dyeing –immune with wax (patek) – templates – stencil – executing some technical projects by using such methods.

13- 2113 Textiles Printing (2)

Printing fabrics by using shablons - Shablon Preparing Method – photography by using sensitive materials – methods of preparing triple and quadruple redundancy and its kinds – preparing executive drawing and color separation – preparing printing pastes – printing and executing some technical projects.

13- 3114 Textiles Printing (3)

Printing cotton fabrics by using some kinds of dyes such as active – vats – pigment – methods of preparing printing pastes – studying the influence of adjuvants – methods of fixing different printings – printing by immunity – printing by removing – printing fabrics mixed with cotton / polyester – executing some technical projects.

13- 1114 Preparing Cellulose Fabrics

Theoretical and practical rules for different technological processes by which Cellulose fabrics pass before printing, dyeing or final finishing which include: terry Burning, desizing, boiling, whitening and discharging.

13- 3111 Dyeing Technology (2)

Studying theoretical and practical rules of cellulose fibers dyeing by active dyes chemically with its different kinds –the most important elements affecting dyeing – theory of protein fibers dyeing which includes: wool, natural silk with different dyes, acid dyes, metallic complexes, chrome, active dyes – different methods used in applying these dyes.

13- 4111 Dyeing Technology (3)

Theories and methods of synthetic fabrics dyeing which include: polyamide dyeing by acid dyes, polyester dyeing by derived dyes, poly-acrylonitrile dyeing by cation dyes, natural fibers dyeing with synthetic fibers which include: polyester / cotton mixture, polyester / wool mixture and acrylic / wool mixture.

13- 2112 Printing Technology

Different methods of textile printing include: wooden templates, stencil, round and flat shablons, copper cylinders, heat transfer, photochemical photography, texture data, its definition, divisions, necessary specifications for such materials, properties and their preparation methods.

13- 3112 cellulose Fabrics Printing Technology

Printing cellulose fabrics by different dyes – methods of preparing printing pastes – adjuvants used in printing pastes – methods of fixing different printings – methods of printing which include: direct printing, removing, immune and printing cellulose fibers mixtures with synthetic fibers: cotton /

polyester.

13- 4108 Final Finishing of textiles (2)

Chemical evolution of textiles – inlaying – cross-linkages – finishing cellulose fabrics to resist lumpiness – CH₃OH (Methanol) compounds – bilateral and multilateral finishing to add special features to textiles – starching materials – softening materials – textiles resistance to dirt and stains.

13- Fibers Chemistry

Studying chemical structure of natural textile fabrics which include cellulose, wool keratin, natural silk, artificial and synthetic fibers which include: polyamide nylon 6, nylon 66, nylon 610, polyester fibers. poly-acrylonitrile – methods of synthetic fibers preparation – different chemical properties of natural and synthetic fibers and their relation to chemical composition.

13- 2110 Dyes Chemistry

Relations between chemical structure of dyes and color – color theories – elements affecting tincture color – relation between chemical composition of tincture and capability – chemical division of tinctures – intermediate composites and their preparation method – azo dyes – and their preparation method – active azo-dyes – properties of azo-dyes and the elements affecting them – dyes of azo metallic complexes.

13- 2111 Dyeing Technology (1)

Studying theory of Cellulose Fibers Dyeing and the most important elements affecting dyeing which include: ionic system, tincture molecules gathering, flipping, PH, temperature, studying theoretical rules and methods of applying different dyes in cellulose fibers dyeing which include: direct dyes, vat dyes, soluble vat dyes, sulfur dyes, black aniline – studying the most important element affecting dyeing by each of such dyes.

13- 4105 Pendants Printing Design

Identifying elements of designing printed artistic pendant and its modern vision including unique fine values and innovating fine solutions for the pendant – studying various kinds of printed designs of curtains (common design, canars, stripes, .. and others) practicing such kinds by using chosen elements.

Graduation Project

Student identifies his fine ideas and solutions suitable for the final project with his supervisors which are considered the essence of his artistic and technological experiences he learned during his educational years, in addition, he shall present an artistic production and scientific report for arbitration by the end of

the year.

13- 3106 Textile Printing Machines

Printing Machines – their theories – printing machines by round bashlons – cylinders – heat transfer – their components – methods of preparing printing cylinders – photography – carving – sing of computer – washing machines – their theories – types – methods of their usage – maintenance methods.

13- 3108 Final Finishing of Textiles

Mechanical Finishing of Fabrics – Terry Removing – Ironing – Tensile and Width Adjustment – Shrinking Resistance –Crepe – Chemical Finishing of Fabrics – Adding Special Immune to Textiles – Water Permeability Immune – Oil Immune – Burning Immune – Immune of Bacteria and Mold.

13- 2115 Preparations of Synthetic and Protein Fabrics

A practical and theoretical study of the most important preparatory processes of fibers of wool and natural silk as well as synthetic fibers which include: nylon – polyester – acrylic – methods of preparing mixed fibers with natural and synthetic fibers.

13- 1116 History of Textiles Printing

Historical study of the emergence of textiles and their evolution through different ages – styles and methods of printing from a historical perspective – evolution of textiles from ancient ages to modern ages – used materials – used colors and dyes.

13- 4117 Textiles Printing Design Economies

Different phases for getting a product of textile printing beginning from idea and design till reaching the product to the consumer, different strategies for designing textile printing, the role of designer in achieving new economical results, means of achieving such results, as it includes applied example for solving problems in the field of designing textile printing.

13- 2201 Materials Properties (1)

Water hardness and how to get rid of it – materials with surface activity – their division – types – theory of its formation and methods of preparation – effectiveness – properties of their aqueous solutions – different usages of materials of surface activity in different technological operations which include preparations, dyeing and printing.

13- 3201 Materials Properties (2)

Theories of using adjuvants in technological operations which include: detergents – derived materials – elements of equality – factors of smoothing – optical bleach factors – factors of wetting – factors of emulsifying – formation of such materials and how to be used in addition to their properties.

13- 3202 Quality Control and Examination (1)

Standard methods to test how natural and mechanical the fibers and fabrics are after different technological operations which include: desizing – whitening – removing – methods of measuring humidity – absorption degree – viscosity – durability – whiteness degree.

13- 4202 Quality Control and Examination (2)

Measures and tests necessary for identifying properties of dyed, printed and finished textiles which include properties of color fixation against washing – sweat – friction – light – ironing. Chemical tests for identifying nitrogenous content – carboxyl – aldehyde of fabrics. Methods of measuring properties of resisting lumpiness – ignition – dirt – wetting. Statistical methods in measuring and calibration.

13- 4202 Systems of Management, Marketing and Feasibility Study of Projects

Means of developing art of textile marketing management theoretically and practically – experimental fields – marketing methods – elements affecting operations of marketing and their relations to the consumer locally and universally – marketing researches – studying prices – distribution and product quality – feasibility studies of projects.

13- 1204 Fibers Nature

Dividing textile fibers and knowing how to recognize them – relation between fibers properties and their structures – morphological structure of natural, artificial and synthetic fibers – natural and mechanical properties of different textile fibers which include thermal, optical, electrical, humidity, durability, elongation, and smoothness properties.

13- 1205 Threads Production

Basics and methods of pulling and twining to produce threads – influence of mistakes and defects in the operation of pulling – threads spinning – whitening fibers, cleaning and mixing – producing long and short threads – producing extended threads – threads numbers – analyzing factors affecting the rapidity of product and its quality.

13- 2206 Weaving Structures

Preparing threads for textile operations, different methods of weaving, different weaving structure, plain, radiator, satin, compound textiles, relation of weaving structure to properties of produced fabrics.

