



# Course Specifications

<b>Course Title:</b>	<b>Textile Dyeing and Printing Technique</b>
<b>Course Code:</b>	<b>327 AAD-3</b>
<b>Program:</b>	<b>Bachelor of Applied Arts</b>
<b>Department:</b>	<b>Applied Arts</b>
<b>College:</b>	<b>Faculty of Architecture and Design</b>
<b>Institution:</b>	<b>Jazan university</b>

## Table of Contents

<b>A. Course Identification</b> .....	<b>3</b>
6. Mode of Instruction (mark all that apply) .....	3
<b>B. Course Objectives and Learning Outcomes</b> .....	<b>4</b>
1. Course Description .....	4
2. Course Main Objective.....	4
3. Course Learning Outcomes .....	4
<b>C. Course Content</b> .....	<b>4</b>
<b>D. Teaching and Assessment</b> .....	<b>5</b>
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods .....	5
2. Assessment Tasks for Students .....	6
<b>E. Student Academic Counseling and Support</b> .....	<b>6</b>
<b>F. Learning Resources and Facilities</b> .....	<b>6</b>
1. Learning Resources .....	6
2. Facilities Required.....	7
<b>G. Course Quality Evaluation</b> .....	<b>7</b>
<b>H. Specification Approval Data</b> .....	<b>7</b>

## A. Course Identification

<b>1. Credit hours: 3 Hours ( 2 theoretical-3 practical)</b>
<b>2. Course type</b>
a. University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
<b>3. Level/year at which this course is offered: Level 6 / Third Year</b>
<b>4. Pre-requisites for this course (if any): Studio Textile printing - 311 AAD-3</b>
<b>5. Co-requisites for this course (if any): None</b>

### 6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	5	100%
2	Blended	0	0%
3	E-learning	0	0%
4	Correspondence	0	0%
5	Other	0	0%

### 7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
<b>Contact Hours</b>		
1	Lecture 2×15	30
2	Laboratory/Studio 1×3×15	45
3	Tutorial	
4	Others (specify) Assessment 1 Continuous assessment (1 hour only) 1 presentation (0.5 hour only) 1 mid-term exam (1 hour only) 1 final exam( theoretical and practical 5 hours)	6.5
	<b>Total</b>	81.5
<b>Other Learning Hours*</b>		
1	<b>Study</b> Theoretical study(1 hour for 1 CH) 1×1×15 Practical(0.5 hour for 1 CH) 0.5×2×15	30
2	<b>Assignments</b> 1 Continuous assessment for 1 hour CH 1×3=3 1 mid-term exam for 1 hour 1 CH 1×3=3 1 final exam( theoretical 2 hours- practical 4 hours) 2+4=6	12
3	<b>Library</b> Preparation for 0.5 hour 1CH - 0.5×3= 1.5	1.5
4	<b>Projects/Research Essays/Theses</b> 4 hours for 1 CH 4×3= 12	12
5	Others (specify)	
	<b>Total</b>	55.5

\* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

## B. Course Objectives and Learning Outcomes

### 1. Course Description

This course includes studying the theoretical and the practical bases for dyeing cellulosic, protein and synthetic fibers with different dyestuffs, the most important factors which affect dyeing process, theory of dyeing with different dyes and methods of printing and washing fabrics

### 2. Course Main Objective

This Course aims to demonstrate the knowledge of different dyestuffs types and know their application and fixation, Through applying dyeing process of cellulosic and protein fabrics with different dyestuffs with clear concepts and methodology. And to be able to compare the factors that affect dyeing process with different dyestuffs .In addition, Identifying the various methods and styles of textile printing.

### 3. Course Learning Outcomes

CLOs		Aligned PLOs
1	<b>Knowledge:</b>	
1.1	Demonstrate the knowledge of different dyestuffs Types and know their application and fixation.	K2
1.2	Identify the various methods and styles of textile printing	K3
1.3	Study the theory of fixation of the used dyes and their properties, methods of fixing prints on fabrics and washing processes	K1
2	<b>Skills :</b>	
2.1	Compare the factors affecting the process of dyeing with different dyes	S1
3	<b>Competence:</b>	
3.1	Process dyeing & printing methods for cellulosic and protein fabrics with different dyes	C3
3.2	Interact with the team work	C2
3.3	Develops her creative skills both individually and collectively	C2

## C. Course Content

No	List of Topics	Contact Hours
1	<b><u>First Textile Dyeing Techniques</u></b> Definition of Dye Commercial Name of Dyes	2
2	<b>Classification of Dyestuffs:</b> 1. Based on their application 2. Based on their Chemical structure <b>Bonds between Dyes and Fibers</b>	2
3	<b>Dyeing of Cellulosic fibers</b> Dyeing with Direct Dyes Chemical Structure of Direct Dyes	2
4	Dyeing Theory of Direct Dyes Factors affect dyeing Process	2
5	<b>Dyeing of Cellulosic fibers with Reactive Dyes</b> Chemical Structure of Reactive Dyes Classification of Reactive Dyes	2
6	Dyeing Theory of Reactive Dyes Factors affect dyeing Process	2

7	<p align="center"><b>Dyeing of Protein fibers</b> Dyeing of Wool fibers with Reactive Dyes Dyeing Theory <b>Dyeing of Wool fibers with Acid Dyes</b> Chemical Structure of Acid Dyes</p>	2
8	<p align="center">Dyeing Theory of Acid Dyes Factors affect Dyeing process</p>	2
9	<p align="center"><b>Dyeing of Synthetic fibers</b> Dyeing of polyester fibers with disperse dyes Dyeing Theory Factors affect Dyeing process</p>	2
10	<p align="center"><b><u>Second: Textile printing Techniques</u></b> Identifying Printing Process Steps of Printing Process Various Paste Styles” preparation-Components &amp; Uses”</p>	2
11	<p align="center"><b>Methods and Styles of Textile Printing</b> <b>Textiles styles’ printing</b> Direct Printing Discharge Printing Resist Printing</p>	2
12	<p align="center"><b>Printing Methods:</b> “ Stencil-Block-Batik- Roller- Rotary-Ink Jet- Transfer Printing- Duplex printing.....etc</p>	2
13	<p align="center"><b>Printing Cotton Fabrics with Direct Dyes</b> Mechanism of Direct Printing Mechanism of White Discharge Printing Mechanism of Color Discharge Printing <b>Printing woolen Fabrics with direct dyes</b> Mechanism of Direct Printing</p>	
14	Revision	2
15	Exams (mid term1- midterm2	2
<b>Total</b>		30

## D. Teaching and Assessment

### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	<b>Knowledge</b>		
1.1	Demonstrate the knowledge of different dyestuffs Types and know their application and fixation.	Lectures.	Direct method (objective test) By test specification table
1.2	Identify the various methods and styles of textile printing	The workshops Brainstorming	
1.3	Study the theory of fixation of the used dyes and their properties, methods of fixing prints on fabrics and washing processes	Open debate- Self-education Practical work	
2.0	<b>Skills</b>		
2.1	Compare the factors affecting the process of dyeing with different dyes	Lectures Self-education.	Direct method Classroom assignment

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
		Open debate- Brainstorming	
<b>3.0</b>	<b>Competence</b>		
3.1	Process dyeing & printing methods for cellulosic and protein fabrics with different dyes	Practical Self-education Practical work	Direct method Classroom assignment
3.2	Interact with the team work		
3.2	Develops her creative skills both individually and collectively		

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Attendance & Participation	Periodically	5%
2	Projects Evaluation	14	35%
	Mid term1 & 2 exams	7-11	20%
3	Final Practical Exam	End of the term	15%
4	Final Theoretical Exam	End of the term	25%
6	Total		100%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## E. Student Academic Counseling and Support

**Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :**

Individual consultations and academic advice is supposed to allocate a minimum of 6 hours per week.

Tutorial for week students is supposed to allocate a minimum of 4 hours per week

## F. Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	“Kate Wells "Fabric dyeing and printing" published by Conran Octopus, March, 2000.
<b>Essential References Materials</b>	Dyeing and Chemical Technology of Textile Fibres Fabric dyeing and printing The Chemical Technology of Textile Fibres, Their Origin, Structure, Preparation, Washing, Bleaching, Dyeing, Printing and Dressing
<b>Electronic Materials</b>	<a href="http://textilelearner.blogspot.com/2012/03/application-of-dyes-according-to-fiber.html#ixzz2swN6WtVU">http://textilelearner.blogspot.com/2012/03/application-of-dyes-according-to-fiber.html#ixzz2swN6WtVU</a>
<b>Other Learning Materials</b>	None

## 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	For theoretical part Lecture rooms” Classrooms accommodated with 30 seats -chairs For Practical Part Dyeing & Printing Laboratory is essential and it should be equipped with all the requirements for printing and dyeing textiles
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Projector Lab top
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Dyeing & Printing Laboratory should be supplied with gas Supply & electricity. As well as it should be provided with all needed equipments and tools necessary for dyeing & printing process

## G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching	Students	Online system course evaluation (indirect)
Quality of learning resources	Students	Objective test by Test specification table (indirect)
course learning outcomes	Students	Course learning outcomes survey. (indirect) Objective test by Test specification table (indirect)

**Evaluation areas** (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

**Evaluators** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)

## H. Specification Approval Data

Council / Committee	
Reference No.	
Date	