

ERASMUS+ PROGRAMME Project Number: 610238-EPP-1-2019-1-JOEPPKA2-CBHE-JP

Project Title: traditional craft Heritage training, design and marketing in Jordan and Syria

Course Outline

Module 6 – Weaving Technology

Authors	Training and Technical Group (TTG) Scientific and Supervising Committee (SC)
WP Number	WP5 / DEVELOPMENT Make traditional crafts skills competency development an integrated part in Teaching
WP Leader	UNIFI
Course Offered by	ABU, MU
Total number of pages	5

Project Coordinator

Dr.Loai Dabbour
Al-Zaytoonah University of Jordan (ZUJ)
Airport Street
Tel: +062 6 4291511 Ext. 112 / Fax: +962 6 4291432
Email: HANDS@zuj.edu.jo
Project website: <https://www.zuj.edu.jo/HA>



Al-Zaytoonah
University of
Jordan



The University of Jordan



Jordan University of
Science and
Technology



The Hashemite University



Karmeh Design Studio



Tishreen
University



جامعة
المنارة
Manara University



Al-Baath University



World University Service
of the Mediterranean



Blue Room Innovation



CESIE



Università degli Studi di
Firenze



Università degli
Studi Guglielmo
Marconi



Technische Hochschule
Ostwestfalen-Lippe

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WEAVING TECHNOLOGY, COURSE SYLLABUS					
Course Code		Course Title	WEAVING TECHNOLOGY	Cr.hr. ECTS	3 6
Class Room		Time			
		Semester			
Instructor(s)			Email:		Phone:
Office Hours	As assigned in instructors schedules on the system & in front of their offices doors				

COURSE DESCRIPTION: (ACCORDING TO THE CURRICULUM):

This course introduces fourth-year students from the Textile Engineering Department during the first and second semesters, the general principles of textile technology and the basic mechanics of the loom, in addition to the operational parameters for producing different samples of fabrics with traditional and modern designs.

COURSE OBJECTIVE:

The objectives of this course are to help students:

1. Introduce students to the fundamental principles of weaving, including warp and weft, fabric construction, and the interaction between fibers and yarns.
2. Familiarize students with various types of looms, weaving machines, and equipment used in modern textile production
3. Explore different weave structures, such as plain weave, twill, satin, and complex structures like dobby and jacquard weaves. Students should understand the characteristics, properties, and applications of each weave type
4. Enable students to create fabric designs and patterns using various weaving techniques, including drafting, threading, and treadling.
5. Offer practical hands-on experience with weaving equipment and techniques through laboratory sessions, workshops, and industry internships, allowing students to apply theoretical knowledge in a practical setting

STUDENT PERFORMANCE CRITERIA:

Based on HANDS Learning Outcomes:

- LO1: Demonstrate an understanding of the historical significance and cultural heritage associated with traditional crafts.
- LO3: Apply traditional craft skills through hands-on training sessions or workshops, demonstrating proficiency in selected techniques.
- LO4: Develop creative solutions by integrating traditional craft elements into contemporary design projects.
- LO6: Identify market trends and consumer preferences related to traditional crafts, including niche markets and potential for commercialization..
- LO16.: Collaborate with artisans, practitioners, and communities involved in traditional crafts. This can foster mutual learning, cultural exchange, and the preservation of traditional craft practices.

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COURSE CONTENT:

Week #	Topic	Type	Grading
W1	Introduction		
W2	Textile weaving Flax, silk fibers and fabrics		
W3	Introduction to handlooms A) Frame Loom B) Rigid Heddle Loom C) Inkle Loom		
W4	Embroidery / the art of decorating fabric		
W5	Tools of handicrafts of weaving		
W6	Tapestry Loom vertical loom and horizontal loom		
W7	Project 1: utilization of tools and producing the fabrics	Project 1	Total 20%
W8	Project 2: developing the design of the traditional fabric like Brocarde and Aghban	Project 2	Total 20%
W9	Traditional Syrian Fabrics		
W10	Types of natural fibers and their utilizations Cotton, Silk, Linen, Wood, Leather, Tarp, and Jute,		
W11	Introducing the term of marketing in traditional fabrics field	Project 3	Total 20%
W12	Project 3: Design and production of fabrics using Looms		
W13	Practice on Looms		
W14	Practice on Looms		
W15	Final submission for Projects and discussion Critical seminars		
* For each project: the specific schedule is within the project description.			

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GRADING:

- Grading will be based on class work and participation, and projects, assignments and quizzes. 60% of your total grade is the accumulation of grades earned on projects divided by two main projects, in addition to the final project (40%) as follow:

No.	Type	Start Week	Submit. Week	Weight
1	Project # 1:	7	15	20%
2	Project # 2:	8	15	20%
3	Project # 3:	12	15	20%
TOTAL				60%
3	Final Exam, class work and Assignments			40%
TOTAL				100%

- All lectures and project demonstrations take place at the beginning of the class time and will not be repeated. When you are absent or late it is your responsibility to get the missed work from your classmate.
- Portfolio and Documentation of Design Work:** Students are required to document all studio work in Digital copies of design work.

REFERENCES:

- References:**
- Savvas Vassiliadis, 2011, Advances In Modern Woven Fabrics Technology, InTech Janeza Trdine 9, 51000 Rijeka, Croatia,
- A.F.Barker, E. Midgley, 2007, Analysis of Woven Fabrics, First Indian Edition
- منشورات جامعة البعث- كلية الهندسة الكيميائية والبترولية، طاهر قدار (2008)
- Handouts:** To be introduced and handed to the students as needed.

ATTENDANCE POLICY:

Attendance policy:

- Attendance will be checked at each class and the university regulations will be strictly followed for student exceeding the maximum rate of absences.
- Late attendance will be considered as an absence.
- Late submissions will not be considered.
- Submissions without follow up with the direct instructor will not be evaluated.

CHEATING POLICY:

Cheating is not tolerated and against the university rules. Cheating will result in failing the course and reporting the incident to the dean of the college of architecture and design.

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List of Suggested Projects in Accordance with HANDS LOs

Week	Project / Task	points
2-3	<p>Project 1: Handcraft weaving</p> <p>Using equipment at HANDS workshops Description of Project 1: traditional craft applications Lecture 1: Frame Loom Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Design preparations <input type="checkbox"/> practice on Composition, Sequence of Experiences, production of the fabric object 	
2-3	<p>Project 2: Handcraft weaving</p> <p>Using equipment at HANDS workshops Description of Project 1: traditional craft applications Lecture 1: Tapestry Loom Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Design preparations <input type="checkbox"/> practice on Composition, Sequence of Experiences, production of the fabric object 	
2-3	<p>Project 3: Fabric partition</p> <p>Using equipment at HANDS workshops</p> <p>Description of Project 3: traditional craft applications. Design of a partition / Screen using Loom techniques. Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Design preparations <input type="checkbox"/> practice on Composition, Sequence of Experiences, production of the fabric object 	
2-3	<p>Project 4: Fabric Design</p> <p>Using equipment at HANDS workshops Description of Project 4: traditional craft applications fabric design Lecture 1: Fabric design parameters Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyzing case studies, <input type="checkbox"/> Build 2D model, Composition, Sequence of Experiences, construction of 3D object 	