

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 2 – Working Drawings

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	ZUJ, HU, JUST,
Total number of pages	6

Project Coordinator

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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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WORKING DRAWINGS, COURSE SYLLABUS					
Course Code		Course Title	WORKING DRAWINGS	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):

A continuation of the building constructions courses focuses on various types of finishing materials and its construction methods. This course is divided into two parts: theoretical and practical. The theoretical part focuses on the basic information which is related to the major finishes of the following building components: floors, roofs, walls and partitions, doors and windows, stairs and lifts and building services including the kitchens and bathrooms. The practical part deals with the relevant construction details of the finishing of the studied building components.

COURSE OBJECTIVE:

The objectives of this course are to help students:

1. offer a comprehensive view of the buildings finishing work, interior as well as exterior, technological context, construction requirements and sequences, and construction details,
2. Encourage critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems,
3. Support the student's creative thinking in the creation the details and application of acquired knowledge for future building practices,
4. Develop basic knowledge and skills in construction estimating, selecting and insulating finishing materials, supervision, fixtures and fittings, mechanical and electrical services in architectural projects, project management and construction scheduling,
5. To gain knowledge about doors, windows, plastering, painting, damp proofing, scaffolding, shoring, underpinning and to take suitable engineering measures.
6. Develop Knowledge of the materials traditionally used in crafts, including their properties, sourcing, preparation, and appropriate usage. This involve understanding natural materials like wood, fibers, or metals, as well as any modern substitutes or adaptations.

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STUDENT PERFORMANCE CRITERIA:

Based on NAAB 2014 Student Performance Criteria for Accreditation:

- B.7 Building Envelope Systems and Assemblies: Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
- B.8 Building Materials and Assemblies: Understanding of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.

Based on HANDS Learning Outcomes:

- LO5: Critically assess the role of technology in preserving, promoting, and innovating traditional craft practices.
- LO10: Develop technical skills in traditional craft techniques such as weaving, pottery, woodworking, metalworking, etc. This includes proficiency in handling tools and materials specific to each craft.
- LO18: Knowledge of the materials traditionally used in crafts, including their properties, sourcing, preparation, and appropriate usage. This involve understanding natural materials like clay, wood, fibers, or metals, as well as any modern substitutes or adaptations.

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COURSE CONTENT:

Week #	Topic	Type	Grading
W1	Overview of the Course Stairs and Ramps Assignment #1		
W2	Elevators and Escalators Assignment #2		
W3	External Wall Finishing Internal Wall Finishing Site Visit		
W4	Doors Windows/ skylight Assignment #3		
W5	Metals in construction		
W6	Wood construction		
W7	Project 1: Explore the potential of materials and processes. Design a unique and decorative object (Steel work, Gypsum, Wood, stone), prepare the required drawings and prepare a model of the object	Project 1	Total 30%
W8	Stone masonry		
W9	Roof Finishing Ceiling (False ceiling/ Gypsum work)		
W10	Kitchens Site Visit		
W11	Bathrooms Assignment #4 Final submission of project 1		
W12	Project 2: Explore the traditional craft experience. Design a wooden box , prepare the required drawings and prepare a model of the object	Project 2	Total 30%
W13	Project 2 design follow up		
W14	Final submission for Assignment #7 and discussion		
W15	Final submission for Project 2 and discussion		
* For each project: the specific schedule is within the project description.			

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	11	30%
2	Project # 2:	11	15	30%
			TOTAL	60%
3	Final Exam, class work and Assignments			40%
			TOTAL	100%

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- 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:**
- Allen, Edward; Fundamentals of Building Construction: Materials and Methods; John Wiley; New York; 1985.
- R. Barry. "The construction of Buildings". Volume 2: Windows, Doors, Fires, Stairs, Finishes". English Language Book Society/Collins 1986
- Ching, Francis. Building Construction Illustrated. John Wiley; New York; 1991. Ching, Francis D.K., Building construction illustrated, fourth edition.
- Arthur Lyons, (2010), Materials for Architects and Builders, fourth edition.
- Edward Allen, (1990), Fundamental of Building Construction, Materials and Methods, John Wiley & Sons.
- Domone, p., Illston j., Construction Materials, Their Nature And Behavior. Fourth edition.
- D. Michelle Addington, (2005), SMART MATERIALS AND NEW TECHNOLOGIES, Architectural Press.
- **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: Door design using traditional / contemporary craft applications Using equipment at HANDS workshops Description of Project 1: traditional craft applications Lecture 1: Doors Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyzing case studies, <input type="checkbox"/> Preparing full technical detailed drawings for the proposed design <input type="checkbox"/> Build 3D model <p>Functional Composition, Architectural style composition, Sequence of Experiences, Design Elements, construction working drawings details, 2D/3D Designs</p>	
2-3	<p>Project 2: Folding Screen - design using traditional / contemporary craft applications Using equipment at HANDS workshops Description of Project 2: traditional craft applications Lecture 1: Screens Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyzing case studies, <input type="checkbox"/> Preparing full technical detailed drawings for the proposed design <input type="checkbox"/> Build 3D model <p>Functional Composition, Architectural style composition, Sequence of Experiences, Design Elements, construction working drawings details, 2D/3D Designs</p>	
2-3	<p>Project 3: 3D wooden geometric Art - design using traditional / contemporary craft applications Using equipment at HANDS workshops Description of Project 3: Geometric applications in craft work. Design and construct a small box using different joinery techniques such as dovetail, finger joints, or box joints. Students will learn precision cutting, assembly, and finishing techniques. Lecture 1: Geometric Design Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyzing case studies, <input type="checkbox"/> Preparing full technical detailed drawings for the proposed design <input type="checkbox"/> Build 3D model 	

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	Functional Composition, Architectural style composition, Sequence of Experiences, Design Elements, construction working drawings details, 2D/3D Designs	
2-3	<p>Project 4: Wooden Boxes design with geometric and biomorphic design (traditional / contemporary craft applications) Using equipment at HANDS workshops Description of Project 3: Geometric and biomorphic applications in craft work Lecture 1: Geometric and biomorphic Design Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyzing case studies, <input type="checkbox"/> Preparing full technical detailed drawings for the proposed design <input type="checkbox"/> Build 3D model <p>Functional Composition, Architectural style composition, Sequence of Experiences, Design Elements, construction working drawings details, 2D/3D Designs</p>	
2-3	<p>Project 5: Small Table design (traditional / contemporary craft applications) Using equipment at HANDS workshops Description of Project 3: wood and metal applications in craft work Lecture 1: material properties Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyzing case studies, <input type="checkbox"/> Preparing full technical detailed drawings for the proposed design <input type="checkbox"/> Build 3D model <p>Functional Composition, Architectural style composition, Sequence of Experiences, Design Elements, construction working drawings details, 2D/3D Designs</p>	
2-3	<p>Project 6: Wooden Pergola design (traditional / contemporary craft applications) Using equipment at HANDS workshops Description of Project 3: wood and metal applications in craft work Lecture 1: material properties Project follow up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyzing case studies, <input type="checkbox"/> Preparing full technical detailed drawings for the proposed design <input type="checkbox"/> Build 3D model <p>Functional Composition, Architectural style composition, Sequence of Experiences, Design Elements, construction working drawings details, 2D/3D Designs</p>	