Co-Funded by the
Erasmus+ Programme
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Al-Zaytoonah University of Jordan

HANDS Vocation courses Road-map

Traditional Craft Heritage Training , Design and Marketing in Jordan and Syria (HANDS)

ERASMUS+Programme

HANDS Project Number : 610238-EPP-1-2019-1-JOEPPKA2-CBHE-JP

Hands

Traditional Craft Heritage Training

Design & Marketing in Jordan & Syria

Co-Funded by the
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HANDS

The craftsman works with his hand

The professional works with his mind

The artist works with his heart, mind and hand

CONTENT

Introduction

Allah has inscribed beauty upon all things.

THE PROPHET MUHAMMAD

(May Allah bless him and give him peace)

"Whence comes the beauty of the world, and whence comes its absence in a world which today threatens to cover the face of the earth?"

Titus Burckhardt

Art of Islam, Language and Meaning

Traditional Crafts spans over fourteen centuries, with unifying principles calls for the mankind to appreciate the totality of existence, these principles necessarily relate to totality, to universality, to infinity.

The focus of the traditional artist is never the expression of his own personal whims or perceptions, but rather that of the unseen roots of existence, and his work, inspired by the wisdom of the Qur'an and by the grace of its Messenger, may Allah bless him and give him peace, is none other than the expressing of these Realities in the finite, bounded, material plane. When that comes to pass, the result is beauty.

Traditional Islamic art serves not only the spiritual needs of the individual, the crafts- man or artist, or the community at large, but also simple human needs. In Islam there is no distinction between beauty and utility, nor is there separation between the sacred and the profane, and likewise there is no difference between art and craft. Everything is a reflection of Eternal Truth. *"Wherever you look, there is the Face of Allah"* (Qur'an 2:115).

The History of Handcraft

Handcraft has been around for centuries, dating back to ancient civilizations such as Egypt and Greece. These cultures utilized handcraft in their daily lives, creating objects such as pottery, textiles, and jewelry.
As time progressed, handcraft evolved into a form of art, with artisans dedicating their lives to mastering their craft. Today, handcraft continues to be a valuable skill and art form, with many individuals and communities preserving traditional techniques and passing them down through generations.

The Benefits of Handcraft

Handcraft offers numerous benefits, both for the artisan and the consumer. For the artisan, handcraft provides a sense of accomplishment and pride in their work, as well as an opportunity to express their creativity and individuality.
For the consumer, handcrafted items offer unique and personalized pieces that cannot be found in mass-produced products. Additionally, purchasing handcrafted items supports local economies and small businesses.

The Process of Handcraft

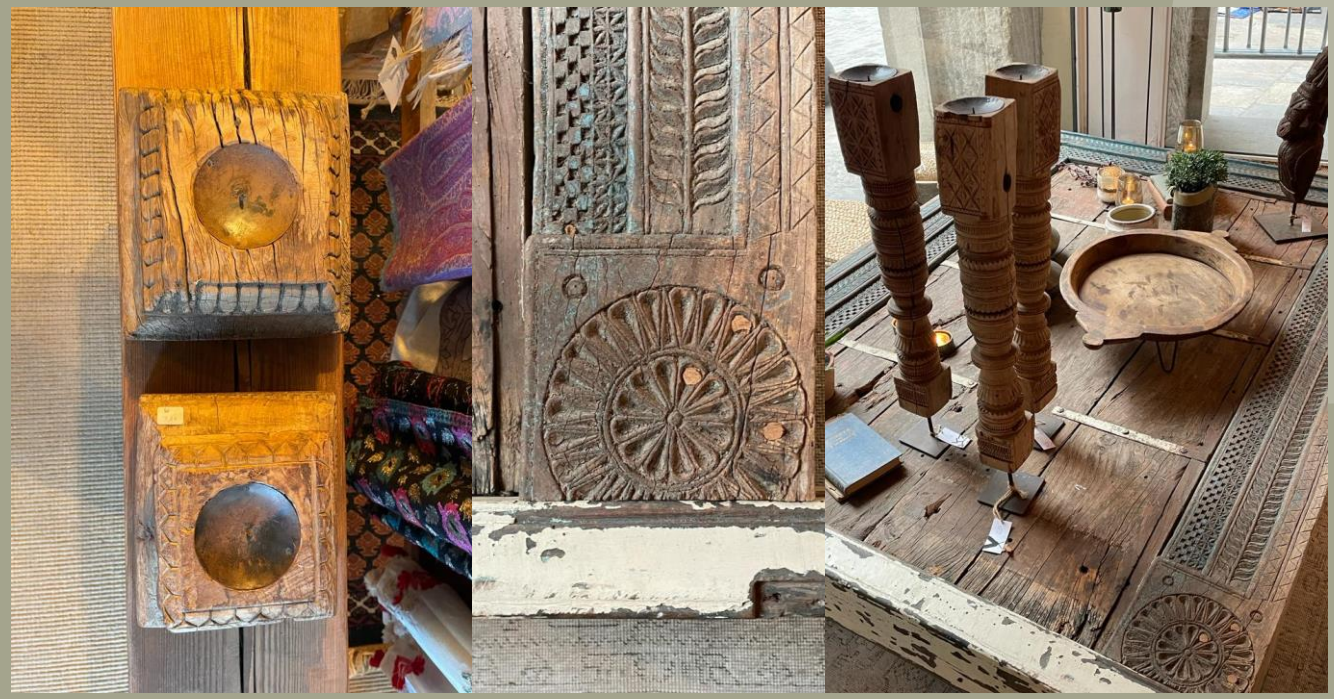
Handcraft involves a meticulous process that requires patience, attention to detail, and a steady hand. Depending on the medium, the process can involve various steps such as sketching, measuring, cutting, shaping, and assembling.
Throughout the process, the artisan must also consider factors such as color, texture, and composition to ensure the final product is aesthetically pleasing and functional.

The Future of Handcraft

While handcraft may seem like a dying art in the age of mass production and technology, there is a growing movement towards reviving traditional techniques and promoting handmade goods. With the rise of e-commerce platforms and social media, it has become easier for artisans to showcase and sell their work, reaching a wider audience and gaining recognition for their skills. As consumers become more conscious of the environmental and social impact of their purchases, the demand for sustainable, ethically-made products is also increasing.

Handcraft Around the World

Handcraft is a universal language that transcends borders and cultures. From the intricate beadwork of Maasai tribes in Kenya to the delicate porcelain of Jingdezhen in China, each culture has its own unique style and techniques. Through the exchange of ideas and techniques, artisans are able to learn from one another and create new and innovative pieces that reflect a blend of different cultures and traditions.



The Value of Handcraft

Handcraft is more than just a skill or a hobby - it is a form of cultural heritage and identity. By preserving traditional techniques and passing them down through generations, we are able to honor our ancestors and keep their stories alive. Additionally, handcraft offers a sense of connection and community, as artisans come together to share their knowledge and passion for their craft. In a world where technology and automation dominate, handcraft reminds us of the beauty and value of human touch and creativity.

THE CORE ARTS GEOMETRY, BIOMORPHIC DESIGN & CALLIGRAPHY

Geometry

Geometric design is a fun trend that focuses on the simplistic beauty of mixing certain shapes, lines, and curves together for creative results. You may have seen it incorporated into fresh tattoo designs, abstract backgrounds, and even jewelry design. And you can mix these modern elements into your work by downloading the incredible Geometric Design resources available to you

Geometry underlies all forms of Islamic arts. It is the visual means by which the human mind can comprehend the order and harmony inherent in Creation. It is the visual representation of the
mathematical patterns found everywhere in cosmos. These patterns, with their esoteric and philosophical attributes, are found within all aspects of Islamic art, whether in the form of geometric designs carved in stone; sweeping arches and hovering domes; painstakingly painted intricate tendrils illuminating a page of Qur'an; or majestically penned, perfectly proportioned letters on an Arabic manuscript or proportionate design of sacred architecture.

What You Should Know About Geometric Design ???

Geometric design is a popular trend that showcases basic shapes in creative designs. Rooted in actual mathematical principles, geometric design can be created with formulaic precision or through experimentation.

THE CORE ARTS GEOMETRY, BIOMORPHIC DESIGN & CALLIGRAPHY

Biomorphic Design

The exuberant, rhythmic, blooming generosity of life itself is the inspiration of Biomorphic Design. Since the Qur'an brings news about the natural order of Creation, and about the Majesty and Mercy of its Creator, what better way to frame the written form of such news than infinitesimal blossoms on hair-like vines twirling and doubling back on themselves in perfect proportion, painted with ground lapis lazuli and pure ground gold?

Nature, the manifestation of the love of Allah, is presented, sometimes with rhythmic movement and growth, sometimes with geometric discipline
and stillness, providing a vivid experience of harmony between opposites.

Students at the College study the origins and development of Islamic ornamentation. They master the tasks of design and composition and then work to acquire the agility and concentration required of hand and heart for the execution of those designs.

They learn the painstaking preparation of pure gold

and study the science of color. Eventually they have the opportunity to apply the ornamentation skills in different media in the College workshops, or to deepen their skill and experience with manuscript illumination, preparing them to enter a long-term apprenticeship with an illumination master.

The College's illumination instructors hold ijaza, authorization, from some of the world's foremost living masters of traditional illumination, keeping alive vital centuries-old lines of transmission.

Arabic Calligraphy

The art of Arabic calligraphy has been enhanced and developed over the course of a millennia. It has written the word of God, helped preserve human knowledge and understanding, and borne witness to the destruction of Baghdad. It has been codified, stylized, and lent itself to abstraction. It has even struggled with the modern world and found renewed life in both art and typography.

Nowhere is calligraphy more revered than in Islam. According to Islamic tradition, God "taught with the pen, taught man that which he knew not" (Qur'an 96:4). No wonder the art of writing is both admired and cherished as a visual expression of faith. Now it is being celebrated in all its forms, with Saudi Arabia extending the Year of Arabic Calligraphy into 2021 and UNESCO registering the art form on its Lists of Intangible Cultural Heritage. Arabic calligraphy is taking its rightful place at the heart of Arab identity. As the Iraqi calligrapher Wissam Shawkat says: "This is the one thing that is pure for us.

that perfection takes years of patient work as an apprentice, who must slowly absorb aspects of his teacher's very state of being until his own is tempered and made ready to support his hand.

Although the patient, enduring practice required of a would-be calligraphy master will only begin at the College, the calligraphy instruction to be received there will serve as a firm foundation for future calligraphy work or for a balanced background for one who would pursue another branch of Islamic arts.

As with the College's illumination instructors, the calligraphy instructors also hold ijaza, authorization, from some of the world's foremost living traditional

calligraphy masters. The College is commtted to preserving the lines of transmission of this knowledge, which go back through centuries.

Islamic Interior Architecture

The Islamic style was not limited to mosques and religious buildings only, but it extended to reach the interior design. In the past, the design of houses in the Islamic style appeared, taking into account privacy and the use of internal courtyards and other elements, but today, after the materials used have developed and turned to Diversification in interior designs, the Islamic style and modernity were combined within the space to create a new and distinctive interior design

even as it uses and harmonizes the various Islamic applied arts such as woodworking, brass work, zillij, and gypsum.

Students study selected examples of Islamic architecture throughout the Islamic world, learning the architectural languages of horizontal elevations, architectural facades, details, and perspective. They design and implement projects that require the successful combinations of the applied arts.

A particularly interesting amalgamation of the core arts is miniature painting. Students survey miniatures from various periods and places in the Islamic world, and then work with the science of symbolism and two-dimensional representation. They study the metaphysical meanings of color and design and then learn the techniques of pigment and surface preparations, drawing, and painting.

Paper Arts

Paper Arts includes document- and book-calligraphy, bookbinding, manuscript illumination, and miniature painting.

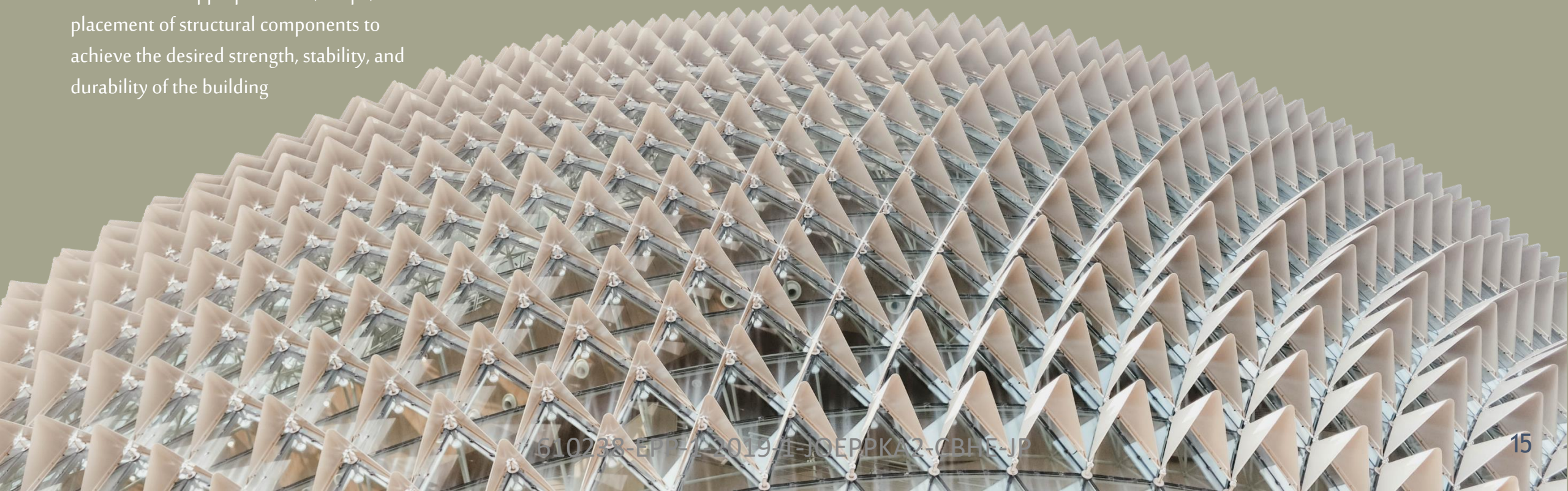
Studying the historical disciplines of bookbinding and papermaking gives students the opportunity to master their hand with writing implements, tools, inks, leathers, and papers.

Biomorphic design is the basis for the art of manuscript illumination, in which calligraphic texts of Qur'an or other sacred meanings are set apart and enclosed in intricate complex compositions.

The Geometry Of Structure

In architecture, the geometry of structure refers to the study of the spatial relationships and physical properties of the various components of a building, including walls, floors, roofs, columns, beams, and arches. The use of geometry is essential in ensuring that a building is structurally sound, aesthetically pleasing, and functional.

Geometry is used in architectural design to determine the appropriate size, shape, and placement of structural components to achieve the desired strength, stability, and durability of the building



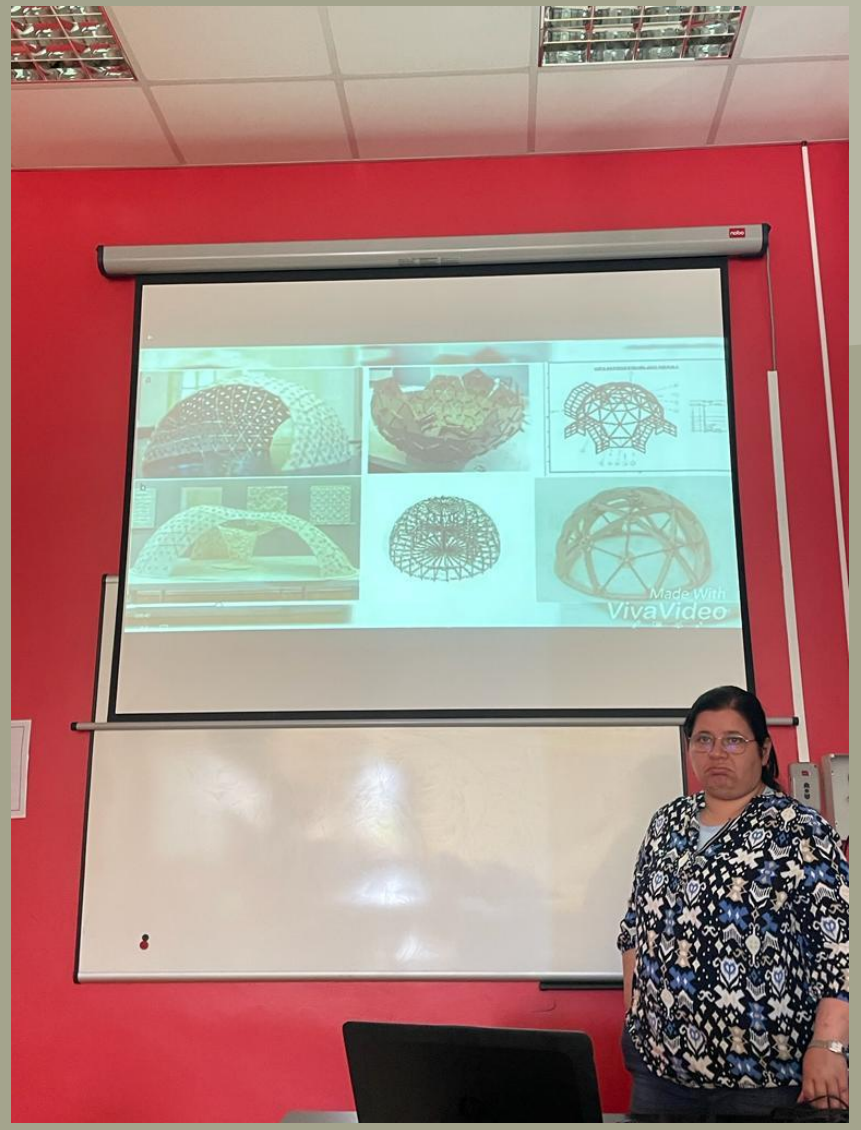
The Geometry Of Structure

. This involves the calculation of geometric parameters such as load-bearing capacity, span, and deflection, and the selection of appropriate materials, such as concrete, steel, or timber.

Geometry is also used in architectural design to create visually interesting and aesthetically pleasing spaces. Architects often use geometric shapes, such as circles, squares, triangles, and curves, to create interesting forms and patterns in buildings. This can enhance the visual appeal of a building and create a sense of harmony and balance in the overall design.

Finally, the geometry of structure plays a key role in the construction process itself. Precise geometric measurements and calculations are used to ensure that building components are fabricated and assembled accurately and efficiently, minimizing waste and ensuring that the building is constructed according to the design specifications.

The Geometry Of Structure



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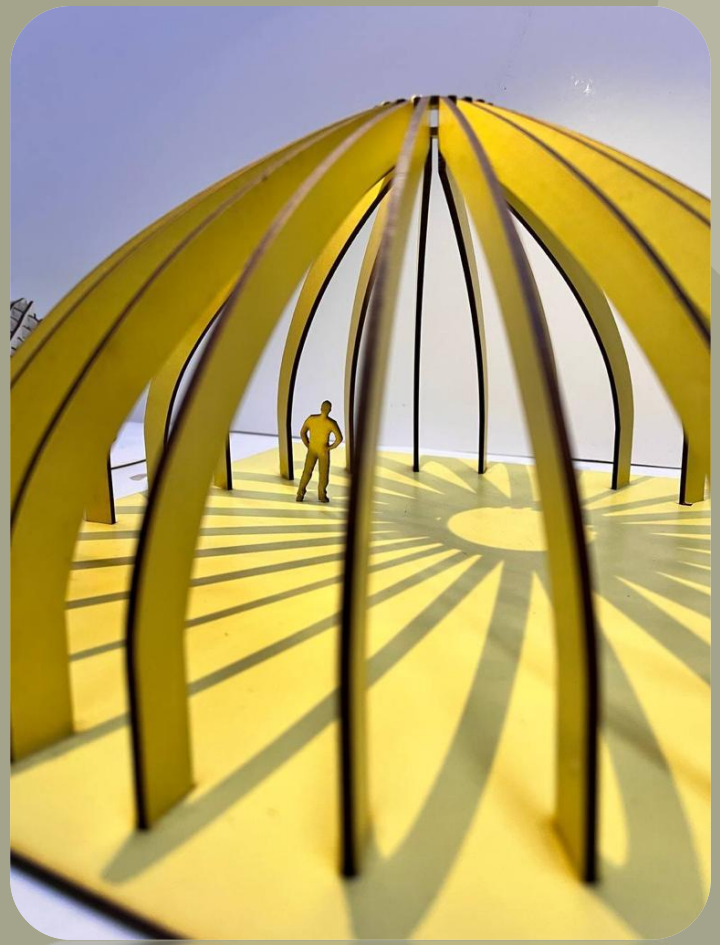

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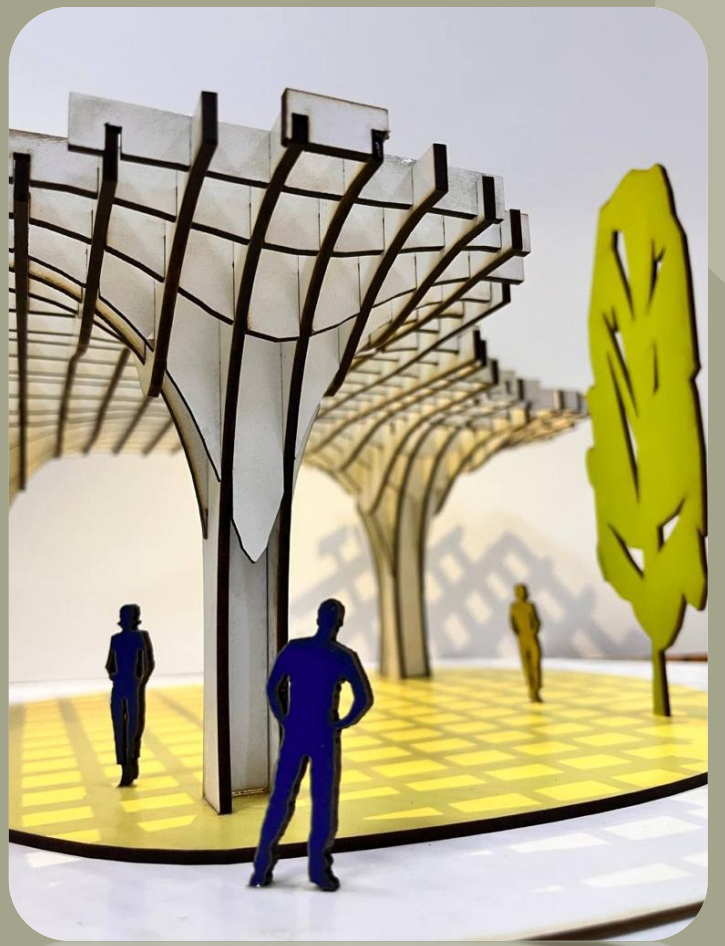

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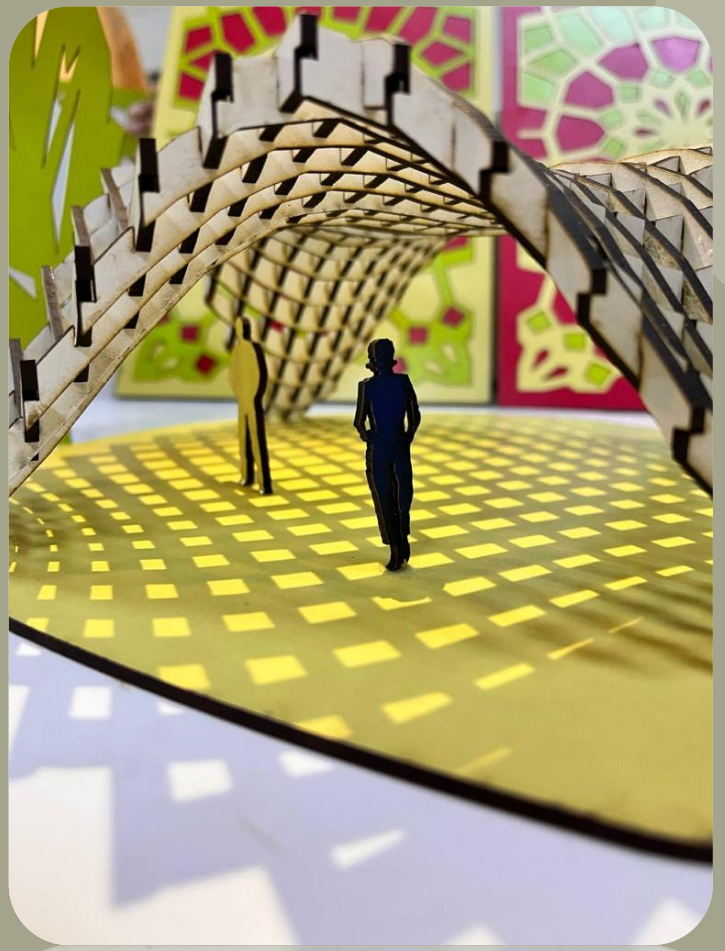

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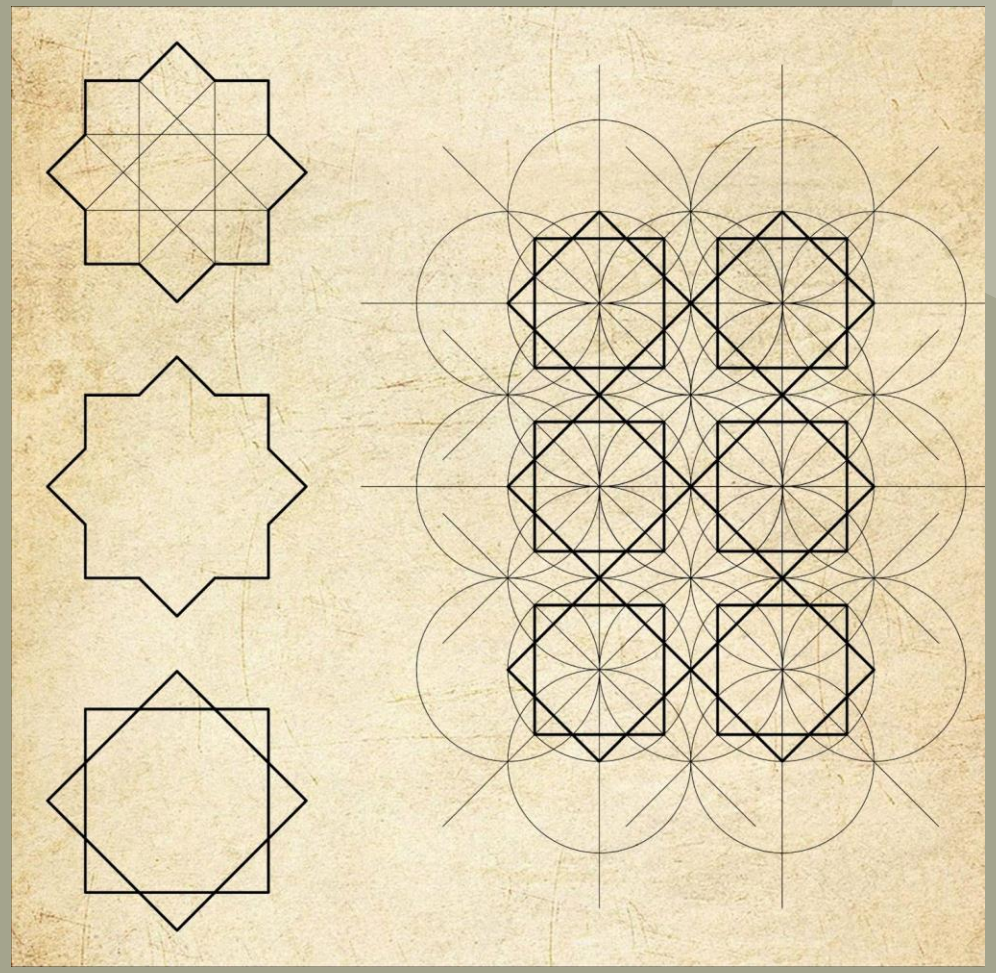
Geometric Principles Of Islamic Architecture

Islamic architecture is known for its rich geometric patterns and designs, which are based on a number of key geometric principles. These principles include:

1.Symmetry: Islamic geometric patterns are often highly symmetrical, with elements arranged around a central point or axis. This creates a sense of balance and harmony in the design.

2.Repetition: Islamic geometric patterns often feature repeated shapes, such as circles, squares, and polygons. These shapes are often arranged in a precise, intricate pattern, creating a sense of rhythm and movement in the design.

3.Tiling: Islamic geometric patterns are often used to create intricate tilework, which is a hallmark of Islamic architecture. Tiling allows for the repetition of patterns over large surfaces, creating a unified, cohesive design.



Geometric Principles Of Islamic Architecture

4-Proportion: Islamic geometric patterns are often based on strict geometric proportions, such as the Golden Ratio. This creates a sense of order and harmony in the design and ensures that the patterns are aesthetically pleasing.

5-Calligraphy: Islamic architecture often incorporates calligraphy, which is a form of decorative writing, into its geometric designs. Calligraphy adds an element of meaning and symbolism to the design and is often used to incorporate religious messages or quotes from the Quran into the architecture

Overall, Islamic geometric principles emphasize the importance of order, balance, and harmony in design. Islamic architecture uses these principles to create intricate, visually stunning designs that are both functional and aesthetically pleasing.

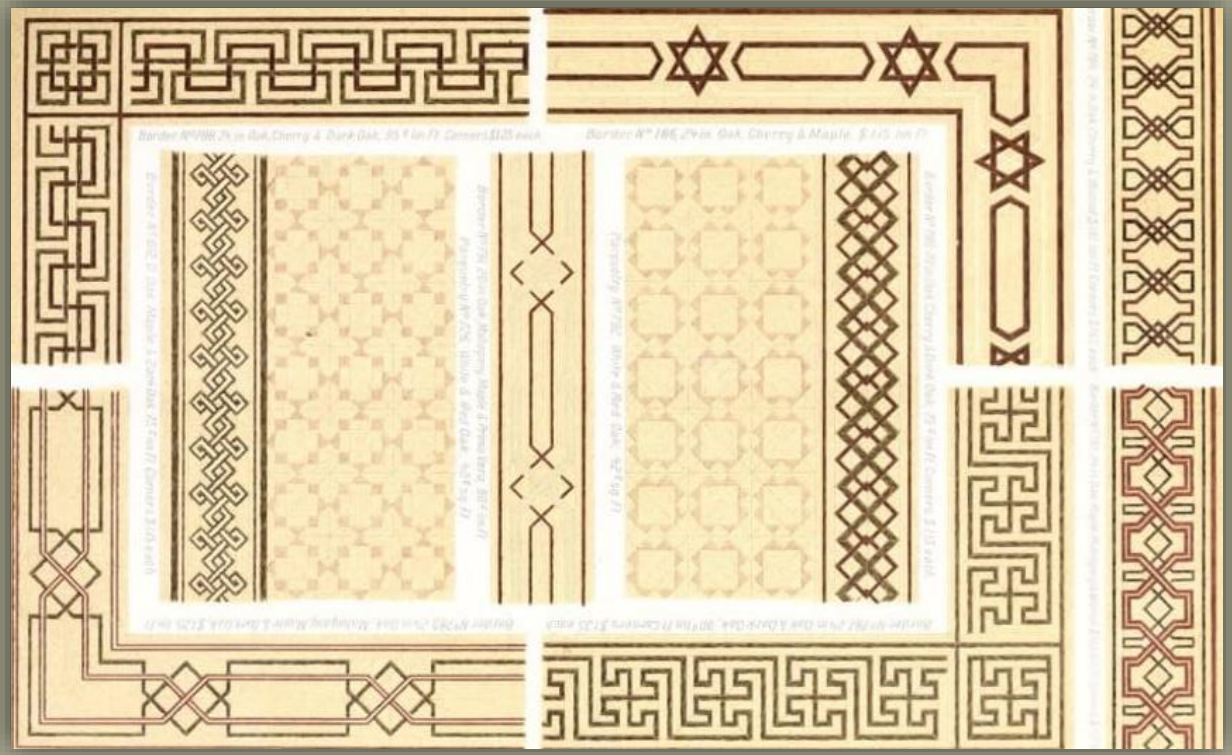
Architectural Ornament

Architectural ornament, also known as architectural decoration or embellishment, refers to the use of decorative elements in the design of buildings and other architectural structures. These decorative elements serve to enhance the aesthetic appeal of a building, as well as to communicate its cultural, historical, or symbolic significance.

Architectural ornament can take many forms, including relief sculptures, carvings, moldings, mosaics, frescoes, and painted decorations. These elements can be found on various parts of a building, such as the façade, columns, cornices, arches, and pediments. They can be made from a variety of materials, including stone, wood, plaster, metal, and glass.

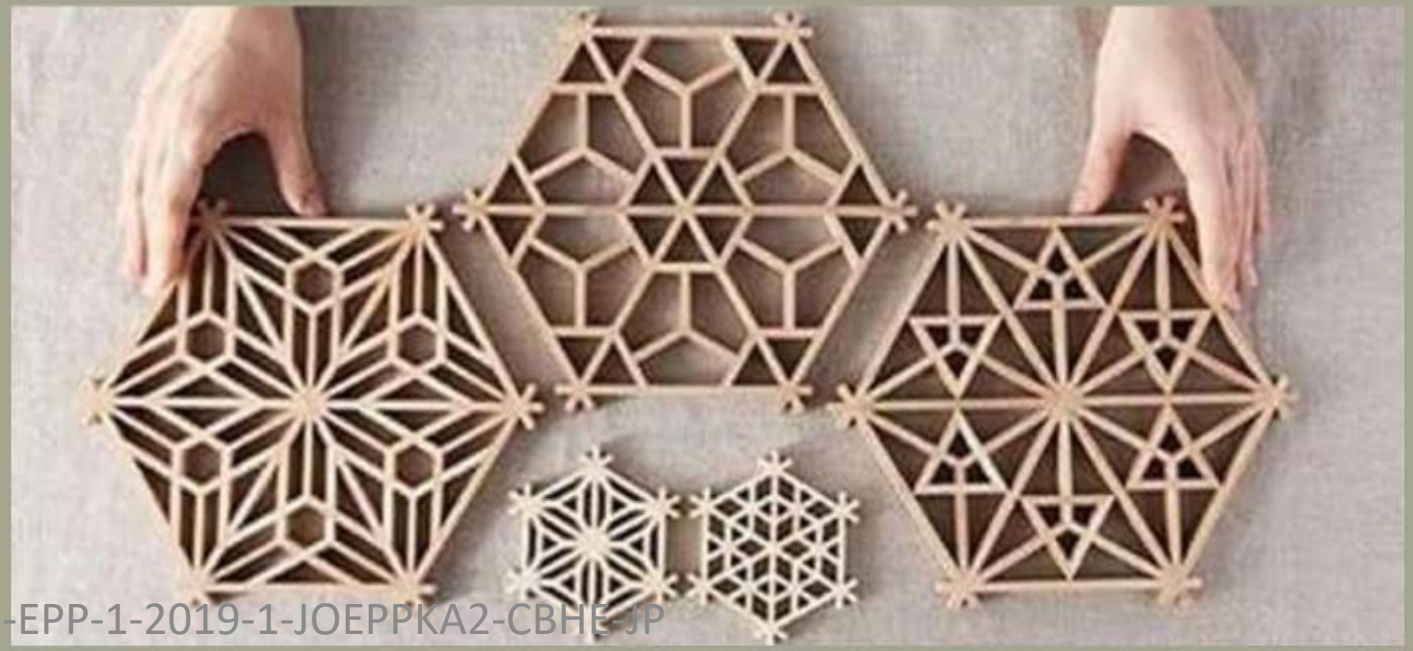
The use of architectural ornament has a long history, dating back to ancient civilizations such as Egypt, Greece, and Rome. In medieval Europe, ornamental elements such as gargoyles, stained glass windows, and decorative stonework were used to embellish the exteriors of churches and cathedrals. During the Renaissance and Baroque periods, ornamental elements became more elaborate and complex, with a focus on creating dramatic effects through the use of light, color, and texture.

Architectural Ornament



Today, architectural ornament continues to be an important aspect of building design, with architects and designers using a range of techniques and materials to create unique and visually striking buildings. The use of ornament can help to add richness and depth to a building's design, as well as to convey its cultural and historical significance.

Ceramics , wood and Furniture Workshop



Agenda

-Wood Workshop

-Ceramics Workshop

-Zillij , Gypsum Carving , Pottery , Resin Workshop

-Fashion Design Workshop

Wood Workshop

Wood Workshop

A wood workshop is where imagination takes shape, and creativity flows through the grain of every project."

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Calligraphy, biomorphic design, and geometry, can be executed in an endless variety of media, transforming the matter into vibrant objects of beauty and function. The College workshops specialize in wood, gypsum carving, ceramics, and brass, as well as paper. After having mastered the fundamentals of these arts, students enter these workshops to gain mastery in the manipulation of the various media.

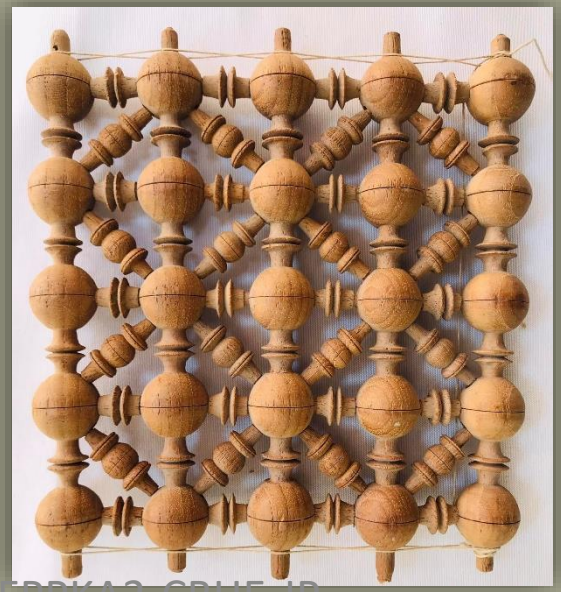
Woodworking

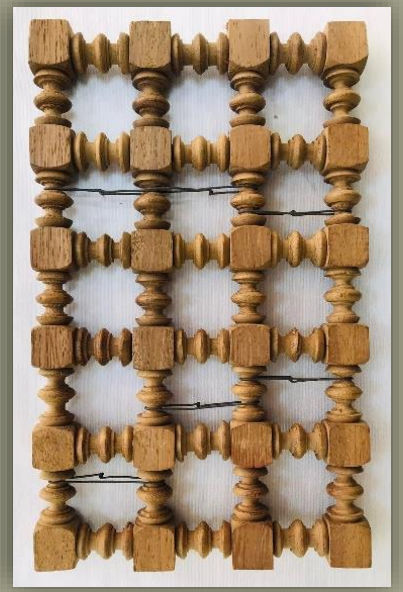
Wood is selected and prepared. By running a lathe or by carving. They practice the art of inlay, in which different colors of wood are combined or inlaid one into the other. They learn the wondrous techniques of interlocking, carpentry, with which hundreds of wooden pieces are joined without nails or glue of any kind, resulting in stunning geometric designs. They study the work of Khairata, wood turning. They are engaged in the production of intricately carved ceilings, finely built doors, pulpits, prayer niches, ingenious shutters and screens, and smaller objects, such as Quran kiosks and small tables.

Wooden Mashrabiyat Islamic Woodworking Arts Icon

Wooden mashrabiyat, one of the most beautiful carpentry arts in the Islamic world, as it is one of the most famous icons of Islamic architecture, and it is a unique aesthetic element that is unparalleled in any other architectural style, which was indispensable in most homes during long historical periods, due to its beauty and utilitarian functions that far exceed its aesthetic form.

Its innovation dates back to the sixth century AH, that is, with the beginning of the Abbasid era, until it became an integral part of Islamic architecture, and despite the decline in the presence of mashrabiya as an element of the modern architectural style in Arab and Islamic countries in the last century, it has returned to decorate homes and facilities again in different areas of Arab countries recently, especially in the countries of the Arab Maghreb.





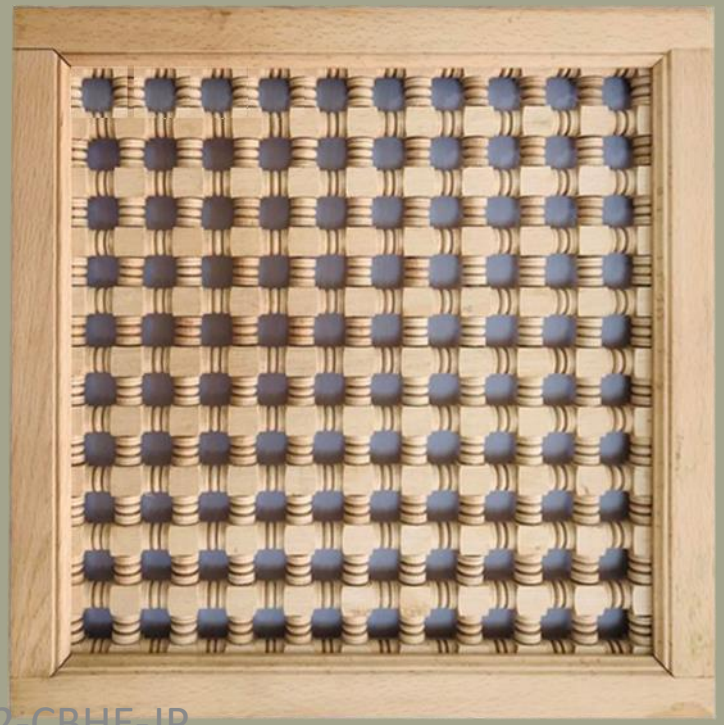
THE APPLIED ARTS

. Balconies and windows were also made of it to cover openings and windows to preserve the sanctity of the people, and utensils were placed in those balconies to cool the water from the air stream on the balcony. In addition, it is easy to change so that it can be switched from one place to another, and change the shape and location of its design

Wooden Mashrabiyat Islamic Woodworking Arts Icon

Mashrabiya is part of the architectural composition, helping to pass through and distribute light, making it dim and quiet, allowing the air breeze to pass through and facilitating looking outside without curious eyes being able to penetrate inside.

In its design, it consists of assembling wood cones from small pieces to form different geometric, botanical and epigraphic shapes



Wooden Mashrabiyat Islamic Woodworking Arts Icon

Woodworking

One of the examples of woodwork was that the student studies Islamic ,and geometric motifs and then makes wooden boxes and studies how to make joints of these boxes in different ways and engrave these decorations on it.

Manufacturing wooden boxes can be a great business idea. Here are some general steps that can be followed to manufacture wooden boxes:

1-Design: Decide on the design of the wooden boxes you want to manufacture. Consider the size, shape, and purpose of the boxes.

2-Materials: Select the type of wood you want to use for the boxes. Hardwoods such as oak, maple, and cherry are popular choices, but other types of wood can also be used.

3-Cutting: Cut the wood to the desired size and shape using a saw. If you need precise cuts, you can use a table saw or a band saw.

4-Sanding: Sand the wood to make it smooth and remove any rough edges or splinters. Use a coarse grit sandpaper for rough sanding and a fine grit sandpaper for finishing.

5-Joining: Join the pieces of wood together using nails, screws, or wood glue. You can also use dovetail joints or finger joints for a more traditional look.

6-Finishing: Apply a finish to the wooden boxes such as varnish or paint to protect them from moisture and give them a polished look.

7-Quality control: Inspect the boxes to make sure they meet your quality standards before packaging and shipping them.

8-Marketing: Develop a marketing plan to sell your wooden boxes. You can sell them online, in stores, or at craft fairs and other events

Remember that manufacturing wooden boxes requires woodworking skills, equipment, and a workspace. If you don't have experience or access to these resources, you may want to consider taking woodworking courses or partnering with someone who has the necessary expertise.

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Woodworking

And also one of the wooden works is the work of a painting or Islamic or geometric decorations, but using a **CNC ROUTER** machine, this machine cuts and drills wood or makes three-dimensional projections and then paints it with a lacquer to give the final face of the painting

Design: First, create a design for the three-dimensional panel using 3D modeling software. This will be used to generate the toolpaths for the CNC router.

Material selection: Choose the type of wood you want to use for the panel. Some types of wood, such as MDF or plywood, may be better suited for 3D carving than others.

Machine setup: Set up the CNC router with the correct bits and cutting speeds for the wood you have chosen.

Import design: Import the 3D design into the CNC router software and generate the toolpaths for the machine to follow.

Woodworking

Cutting: The CNC router will use the toolpaths to cut the wood into the desired shape, creating the 3D panel

.

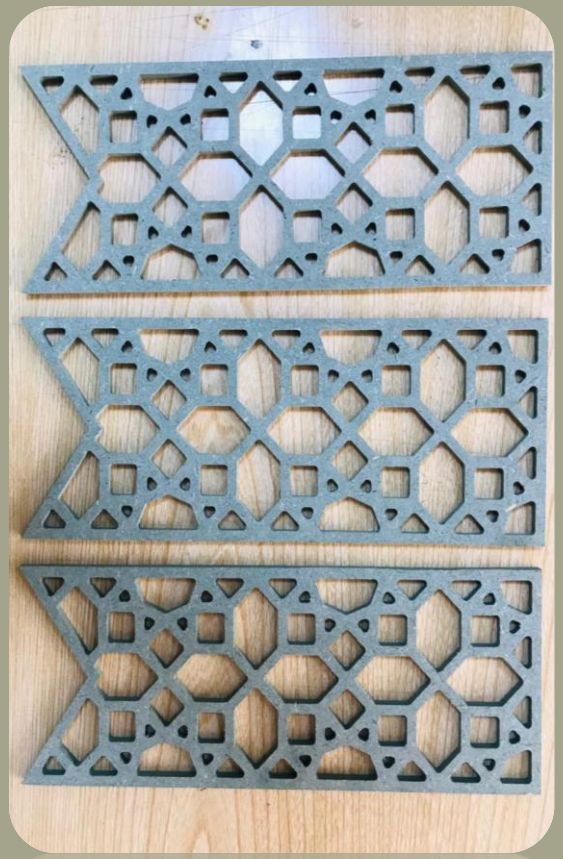
Sanding and finishing: Sand the wood to remove any rough edges or imperfections. Apply a finish to protect the wood and enhance its appearance.

Keep in mind that creating a three-dimensional panel of wood using a CNC router can be a complex process, and it may require multiple passes with different tools to achieve the desired result. Additionally, you may need to experiment with different wood types and finishes to find the combination that works best for your project.

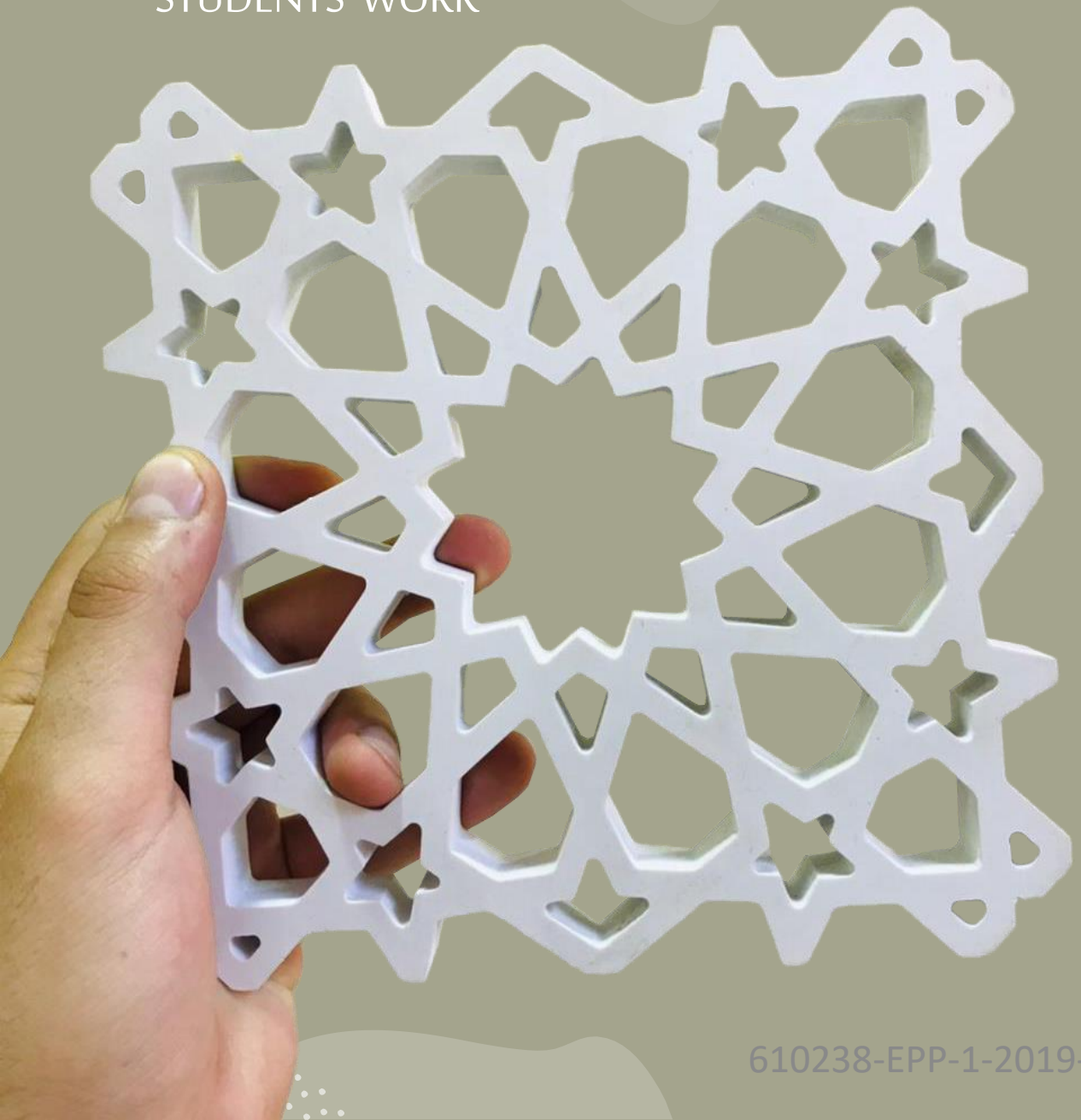
THE APPLIED ARTS

STUDENTS' WORK

STUDENTS' WORK



STUDENTS' WORK



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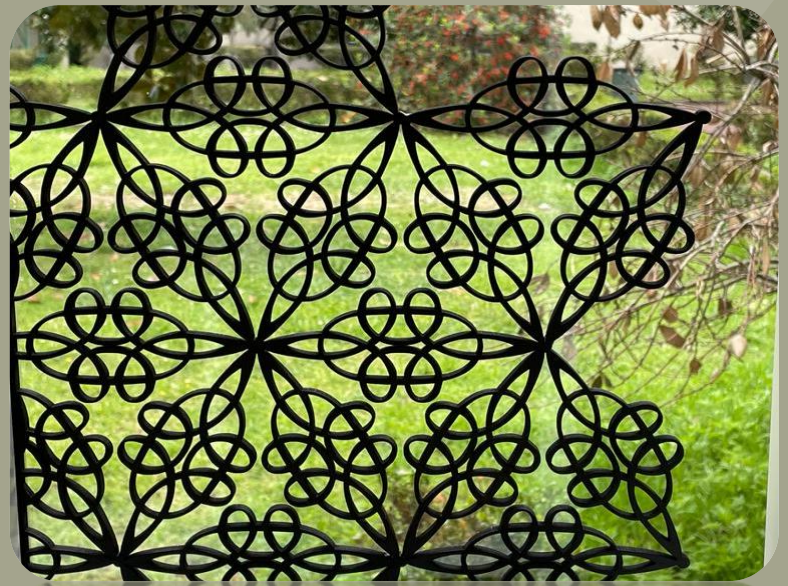

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STUDENTS' WORK

SIMPLE DIY WOOD CLOCK USING SCRAP PLYWOOD

MATERIALS NEEDED TO MAKE A WOOD CLOCK

- Thin Scrap plywood.
- Scrap MDF or plywood
- Wood stains in a few colors. I used Walnut, Nutmeg and Golden Oak.
- Clock mechanism kit (look for shaft length based on the thickness of your plywood)
- Jigsaw or scroll saw or band saw
- Power drill
- Table saw or a BladeRunner X2 (which is what i used)
- White paint pen
- A strong glue

SIMPLE DIY WOOD CLOCK USING SCRAP PLYWOOD

STEP 1 – CUT BASE

STEP 2 – PREPARE STRIPS

STEP 3 – ATTACH STRIPS

STEP 4 – TRIM THE STRIPS

STEP 5 – ADD CLOCK NUMBERS

STEP 6 – ADD WALL CLOCK KIT

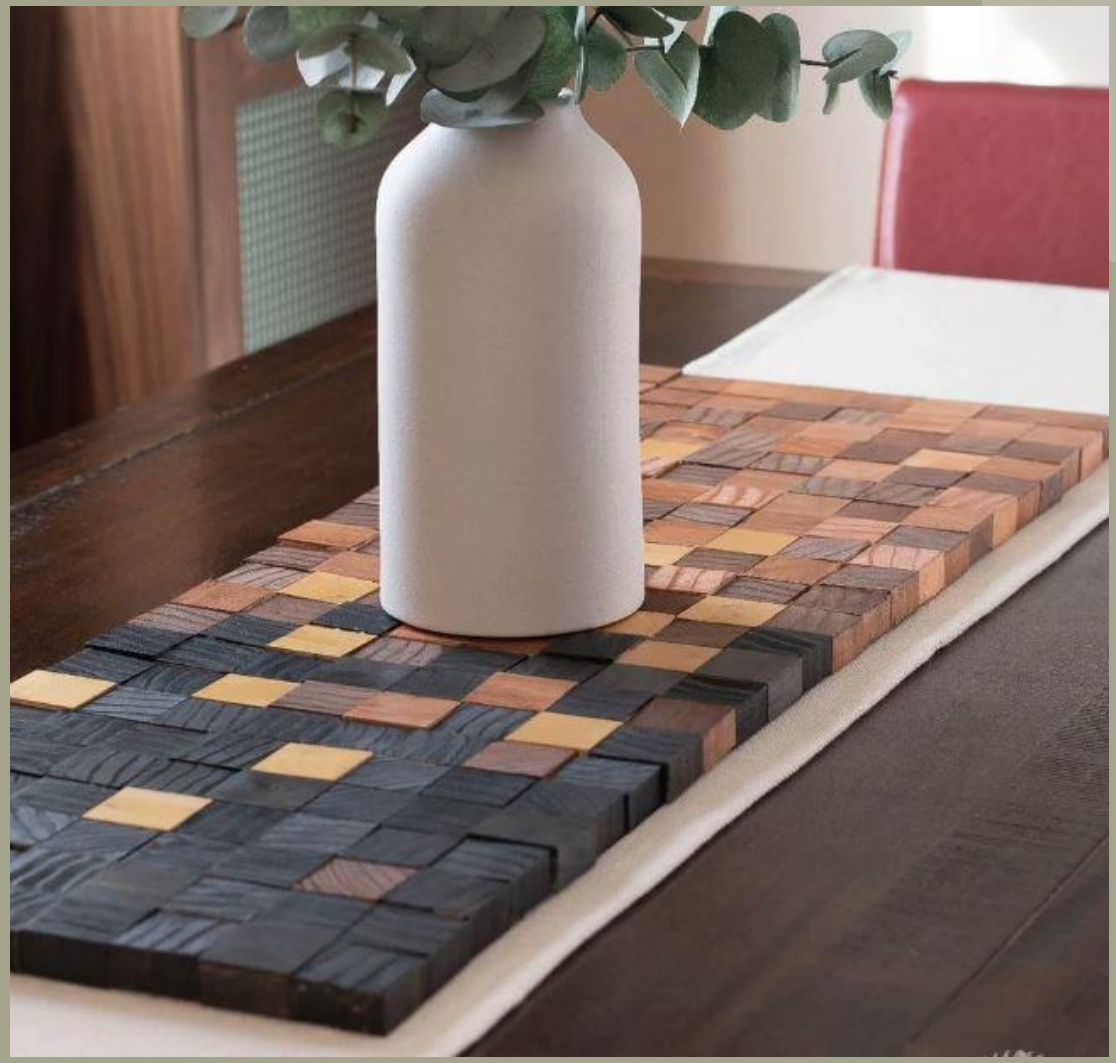
DIY TABLE RUNNER USING SCRAP WOOD

MATERIAL NEEDED

- Scrap boards. I used 1×2 and 2×2 boards
- Thick canvas duck cloth
- Arrow Glue Sticks
- Stain and paint in the color of your choice. I used:
  - Ebony black
  - Gold paint
  - American walnut
  - Maple
- Sanding block with 220 grit sandpaper
- Tack cloth

TOOLS NEEDED

- Miter Saw I use this one.
- Arrow GT300 Glue Gun



DIY TABLE RUNNER USING SCRAP WOOD

STEP 1: IDENTIFY THE BOARDS

STEP 2: MAKE THE CUTS

STEP 3: CLEAN UP THE BLOCKS

STEP 4: STAIN

STEP 5: GLUE THE BLOCKS

STEP 6 – WORK DONE

DIY WOOD TRAY USING ONLY 3 TOOLS

MATERIALS NEEDED

- Lumber per the plans (a 1×8 board and ¼″ thick hobby boards)
- Kreg Jig – I used the new Kreg 320, but you can use any Kreg Jig.
- (See my full guide on how to use a Kreg Jig for beginners)
- Miter Saw
- 1-¼″ pocket hole screws
- Power Drill
- Brad nailer
- 1¼″ brad nails
- Wood Glue
- Face clamps
- Kreg hardware jig
- Stain or paint of your choice. I used Gel stain in Nutmeg and Java.
- Topcoat of choice – I used this one.
- Hardware of choice.

DIY WOOD TRAY USING ONLY 3 TOOLS

STEP 1: CUT BASE PANELS

STEP 2: CUT THE TOP STRIPS

STEP 3: STAIN BOARDS

STEP 4: MAKE POCKET HOLES

STEP 5: ATTACH BOARDS

STEP 6: BUILD A TRAY BASE

STEP 7: ATTACH SIDES

STEP 8: APPLY FINISH AND ADD HARDWARE

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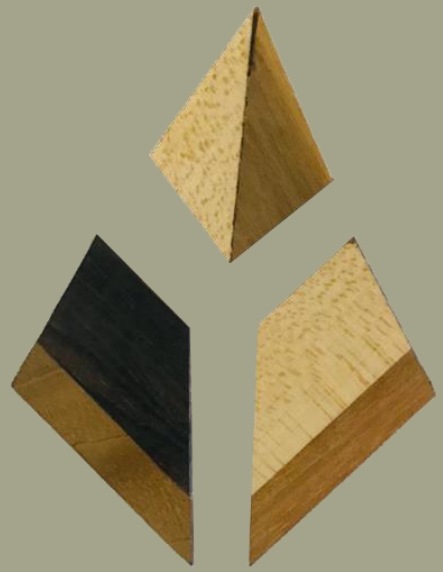
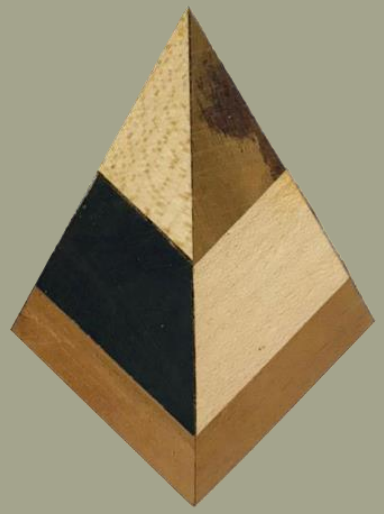


STEP 1



STEP 2

STEP 3

STEP 4

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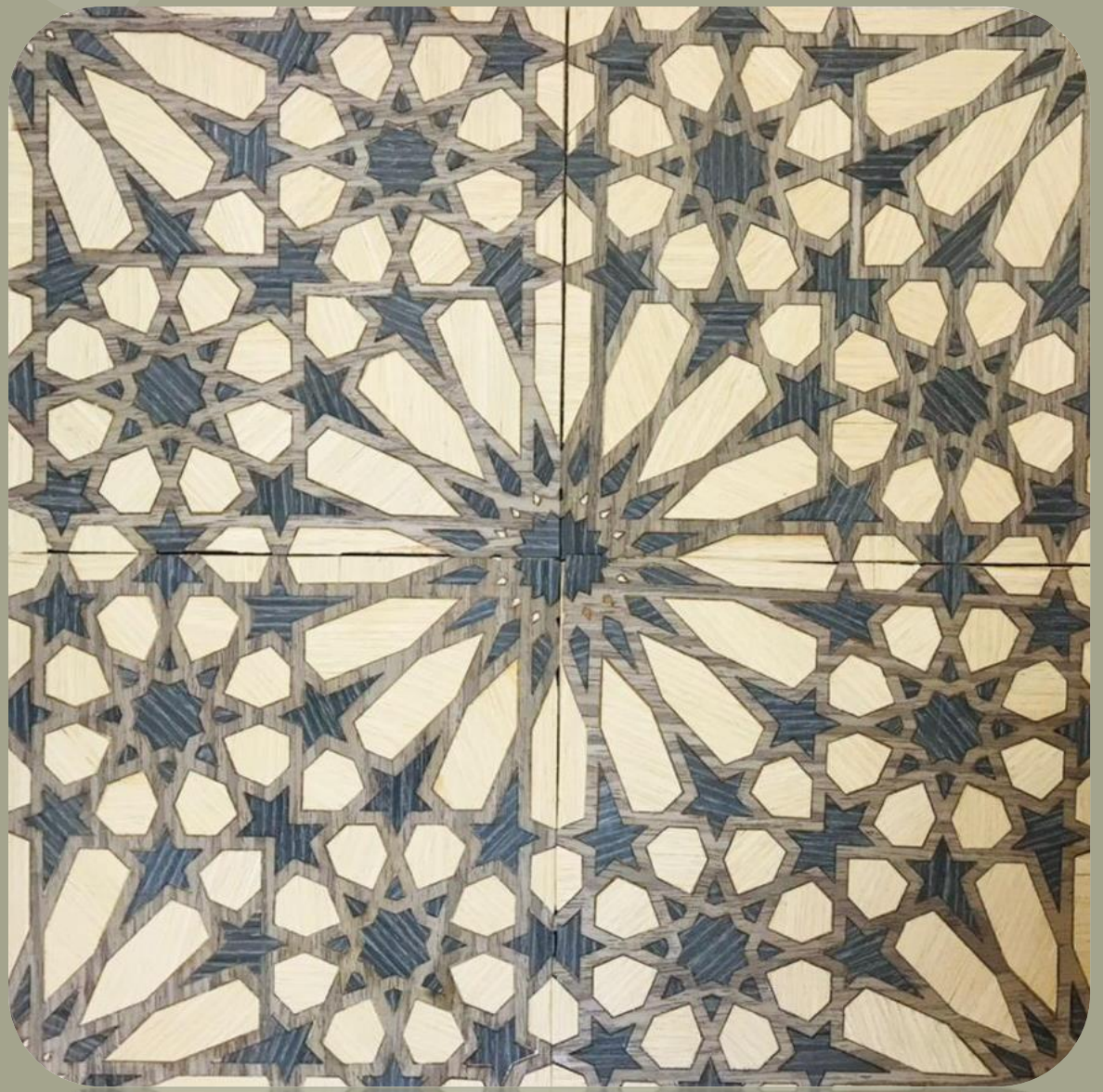


THE APPLIED

FOLDING SCREEN

This elegant folding screen has a multitude of uses. It can be used to divide a room, or to screen off an area such as a home office or craft space. It's made from lightly stained white oak (although you could vary the wood depending on your taste), and is backed with plywood panels. These contrasting panels can be covered with wallpaper to match your décor or to pick out a feature color, as well as fabric, wood or window film on transparent acrylic.

MATERIALS NEEDED

- ·Bar clamps
- ·Belt sander
- ·Dust mask
- ·Framing square
- ·Jigsaw
- ·Miter saw
- ·One-handed bar clamps
- ·Sanding block
- ·Table saw
- ·Tape measure
- ·Utility knife
- ·Butt hinges – 3 x 3-in.
- ·Lumber (see Cutting Lists)
- ·Primer
- ·Stain
- ·Wallpaper
- ·Wallpaper paste
- ·Wipe-on polyurethane
- ·Wood glue

FOLDING SCREEN

STEP 1: MAKE ALL THE PARTS +PREFINISH THEM

STEP 2 CUT GROOVES IN THE RAILS AND STYLES

STEP 3: MORTISE THE RAILS

STEP 4: MARK THE ARCH

STEP 5 : MAKE THE PANELS

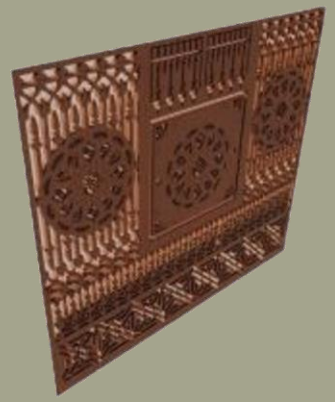
STEP 6: ASSEMBLE THE DIVIDERS

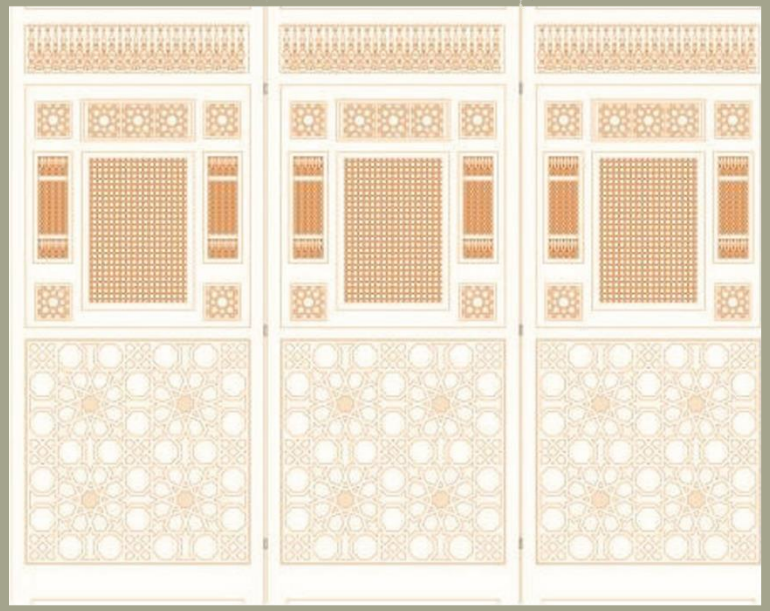
STEP 7: Add the muntin's

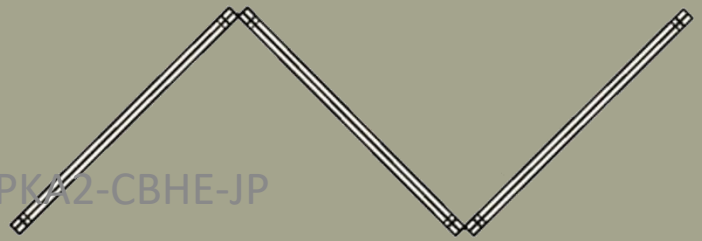
STEP 8: WORK DONE

FOLDING SCREEN

STUDENTS' WORK







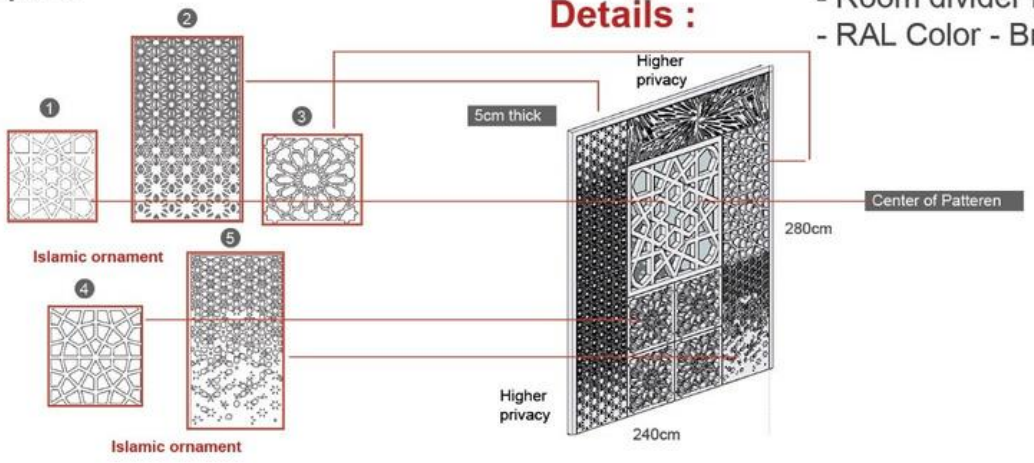
FOLDING SCREEN

STUDENTS' WORK

Patteren Concept

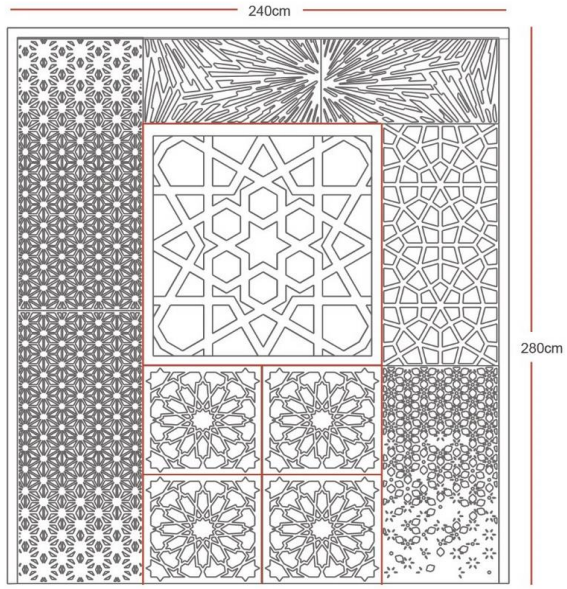
The design one reflects the Islamic decorations in one pattern as room divider to create more privacy in spaces

Details :



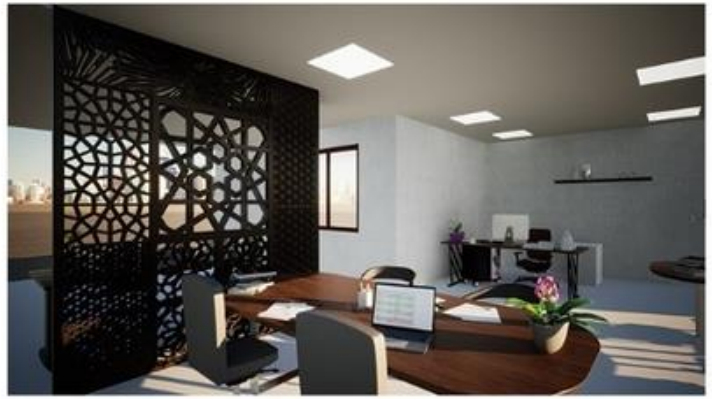
Design Specifications :

- Islamic Patteren Style
- Fixed Wood Partition
- Room divider function
- RAL Color - Brown 8002

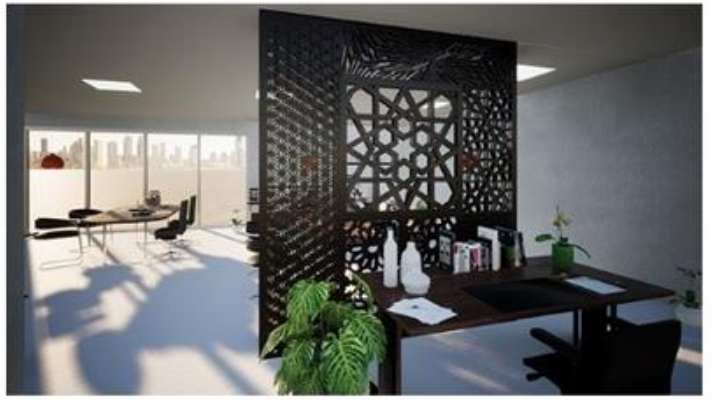


Elevation - Scale 1:10

3D Shot



3D Shot



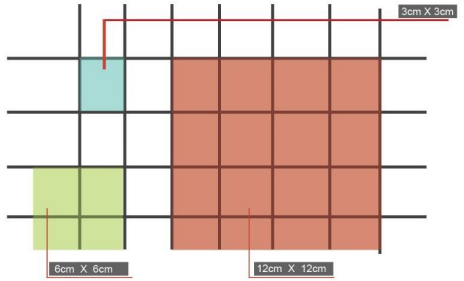
3D Shot

FOLDING SCREEN

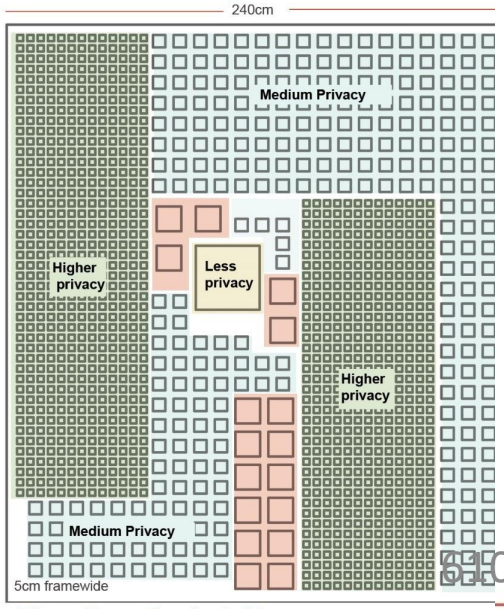
STUDENTS' WORK

Patteren Concept

The design two reflects the modular generations for grid 3cm*3cm to 12cm*12cm as modern wooden partition



The Patteren Design

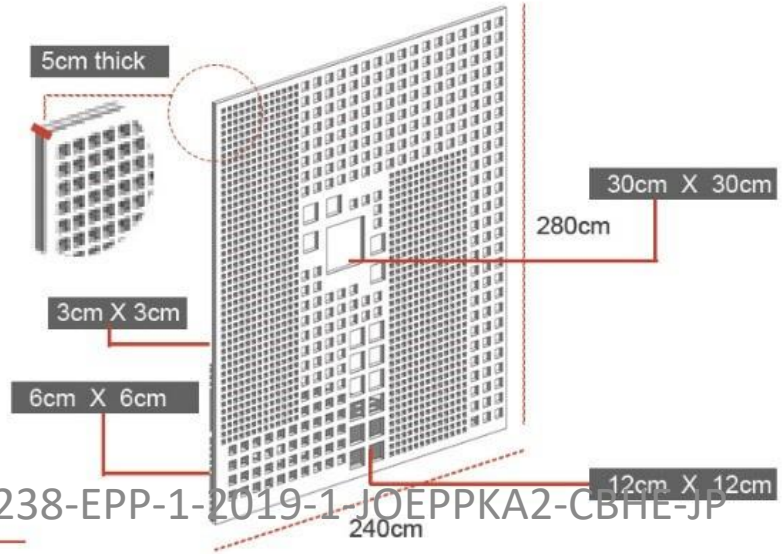


Elevation - Scale 1:10

Design Specifications :

- Modern Patteren Style
- Fixed Wood Partition
- Room divider function
- RAL Color - White 9010

Details :



3D Shot

3D Shot

3D Shot

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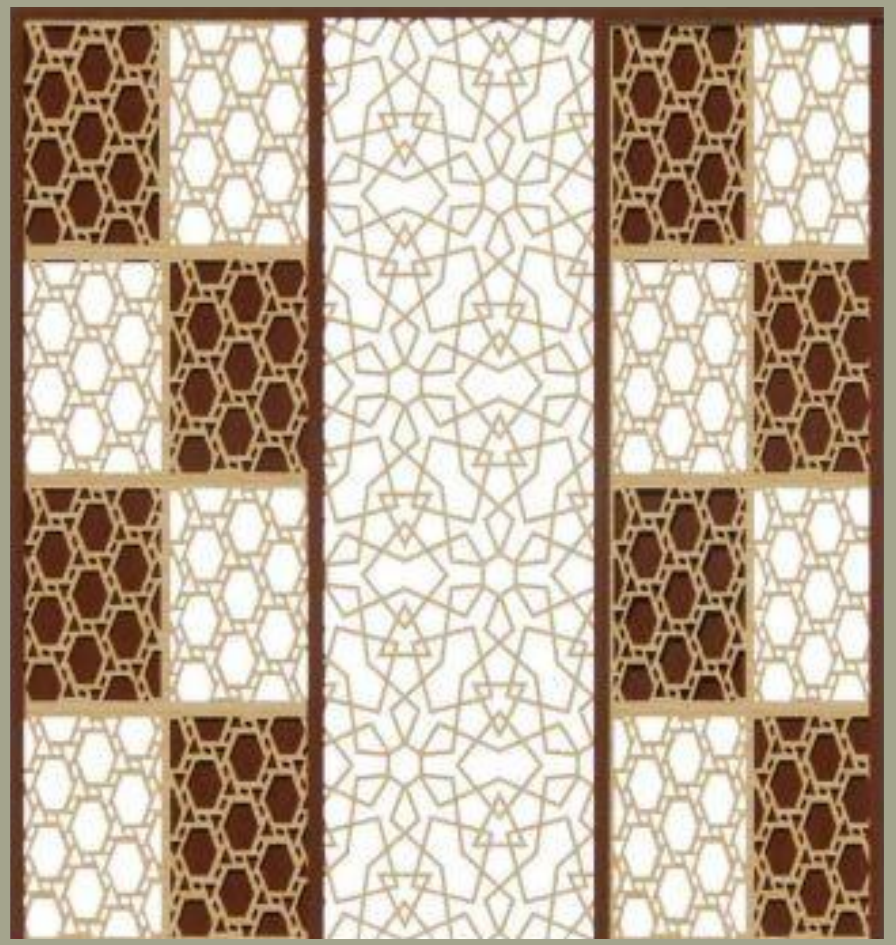
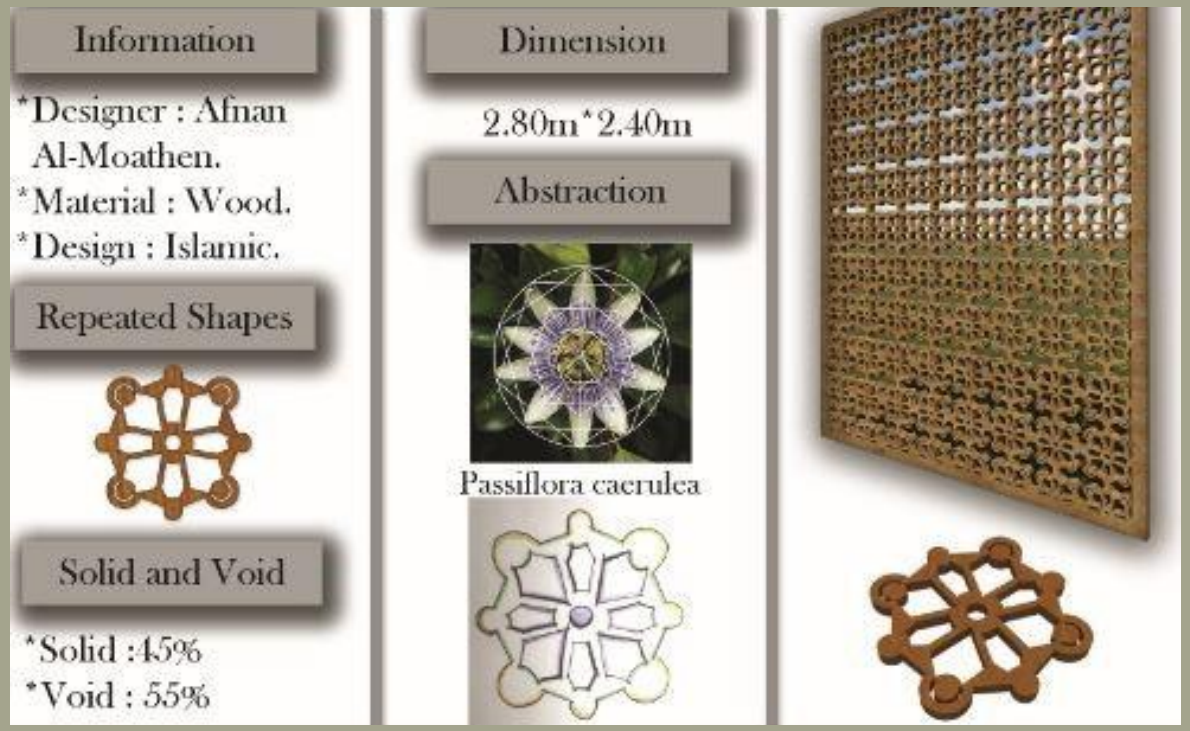
FOLDING SCREEN

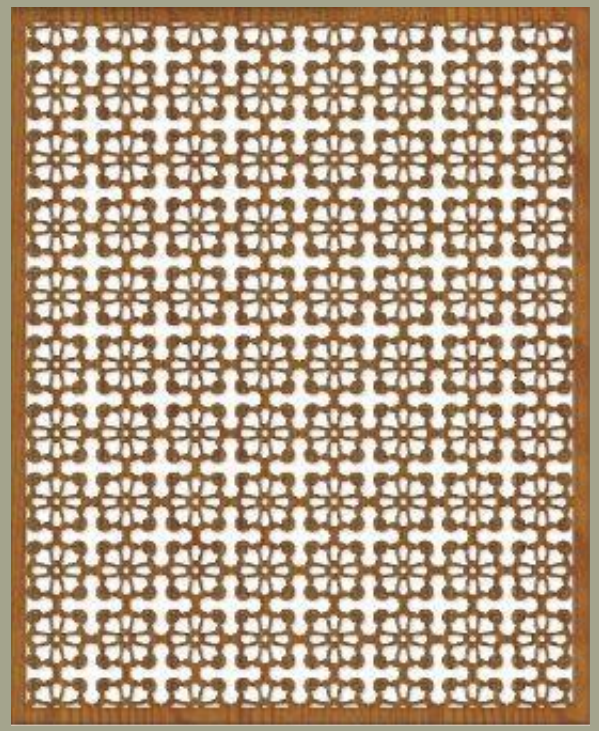
STUDENTS' WORK



FOLDING SCREEN

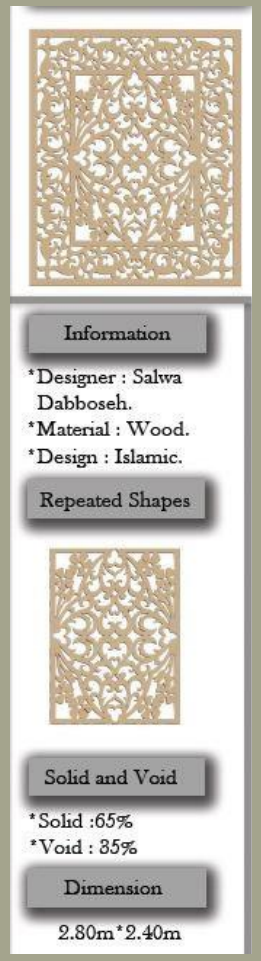
STUDENTS' WORK





FOLDING SCREEN

STUDENTS' WORK



FOLDING SCREEN

STUDENTS' WORK

HEXAGON END TABLE

OBJECTIVE OF THE PROJECT

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.

Table of Contents

HEXAGON END TABLE

MATERIALS NEEDED

- ·Lumber per the plans
- ·Multi-mark tool
- ·Table Saw (if using a 1×10 board)
- ·GRR-RIPPER push block
- ·Miter Saw .
- ·Power Drill/Driver
- ·Brad Nailer and 1 ¼" finish nails
- ·⅜" dowel jig kit
- ·⅜" fluted dowel pins
- ·Wood glue
- ·Jig Saw
- ·Band Clamps
- ·Pipe Clamps or bar clamps
- ·Digital angle gauge (Optional but recommended for accuracy)
- ·Stain or paint of your choice.

HEXAGON END TABLE

STEP 1: MAKE THE CUTS

STEP 2: BUILD FRAMES

STEP 3: CUT FRAMES

STEP 4: GLUE UP THE FRAMES

STEP 5: CUT THE TOP.

STEP 6 : Add finish

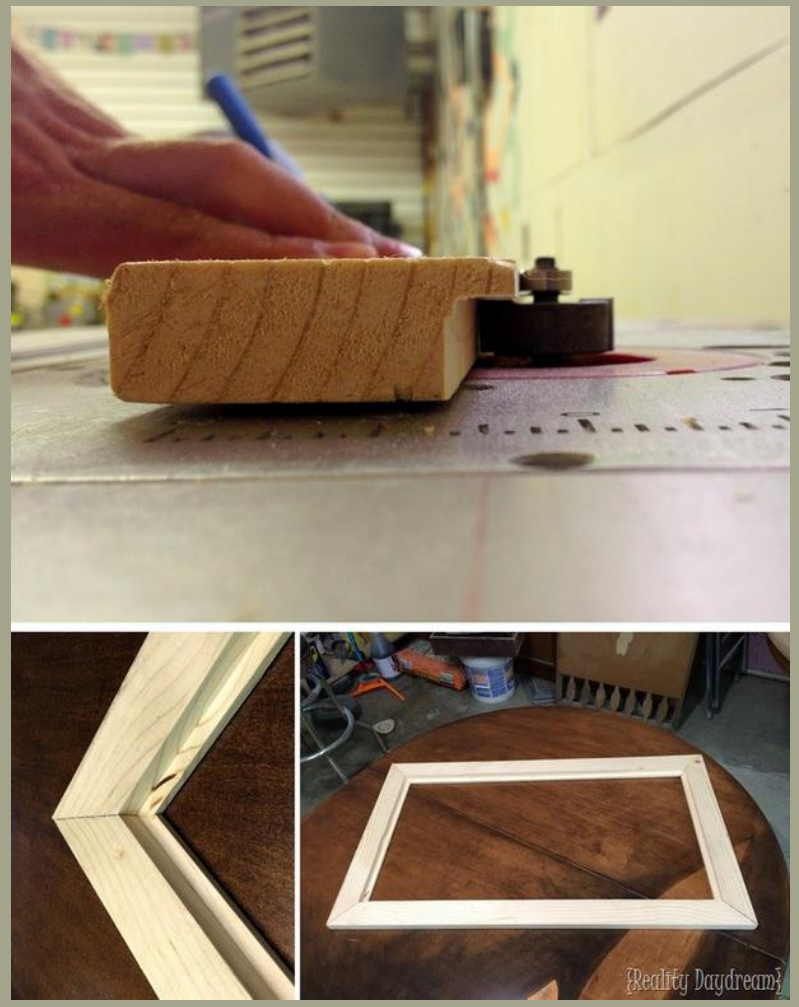
3D WOODEN GEOMETRIC ART

OBJECTIVE OF THE PROJECT

Support the student's creative thinking in the creation the details and application of acquired knowledge for future building practices.

THE APPLIED ARTS

3D WOODEN GEOMETRIC ART



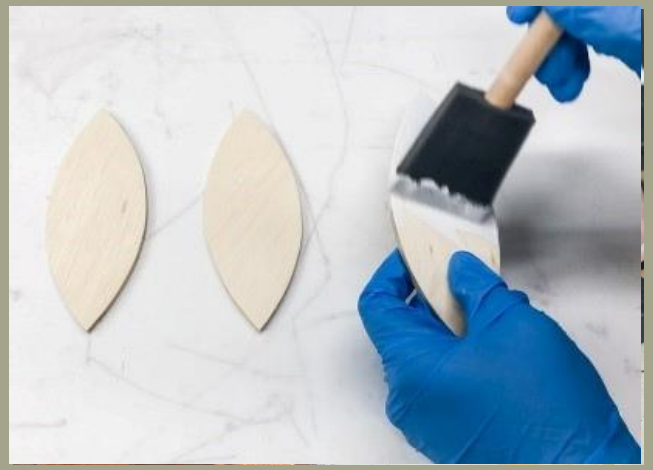
WOOD WALL ART FROM PLYWOOD SCRAPS

- OBJECTIVE OF THE PROJECT
- offer a comprehensive view of the buildings finishing work, interior as well as exterior, technological context, construction requirements and sequences, and construction details.

WOOD WALL ART FROM PLYWOOD SCRAPS

STEP 1: CUT OUT SHAPES AND SAND

STEP 2 :Stack up the four pieces of each size and sand the edges at the same time. This will keep the shape consistent.



STEP 3: Give the fronts a quick sanding with 220 grit sandpaper, then wipe off the dust with a tack cloth.

TECHNIQUES FOR MAKING A FEW SIMPLE BOXES

OBJECTIVE OF THE PROJECT

Study 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.

Box With Lid

Basic Hinged Box

1

2

3

4

5

6

7

Box With Mitered Corners and Pegged Top

1

2

3

4

5

6

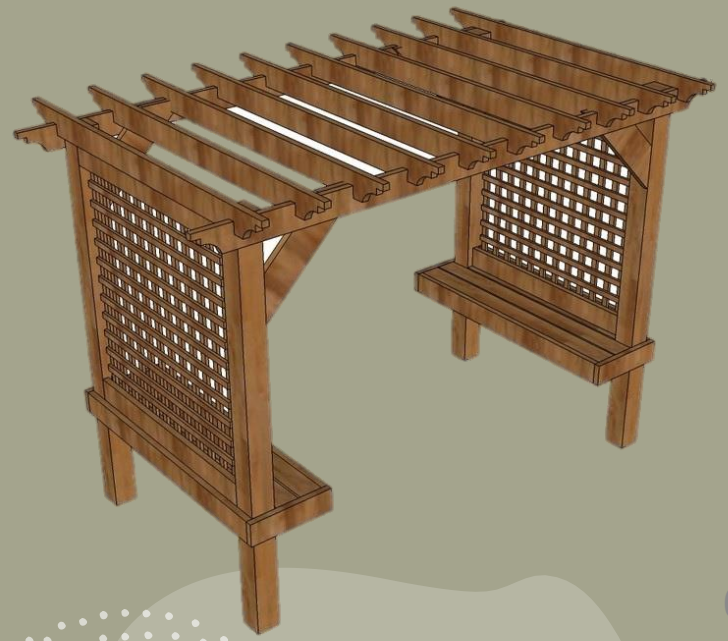
7

8

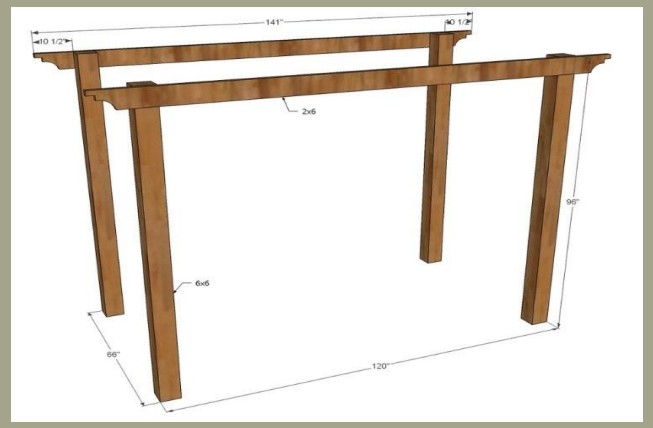
PERGOLA OUTDOOR ROOM

OBJECTIVE OF THE PROJECT

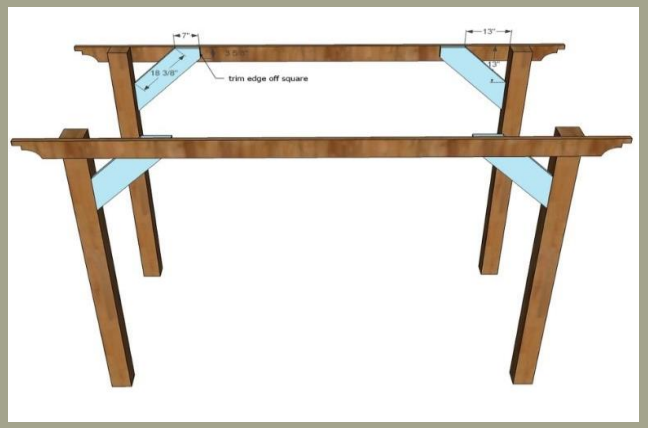
·Building Materials and Assemblies: Understanding of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.



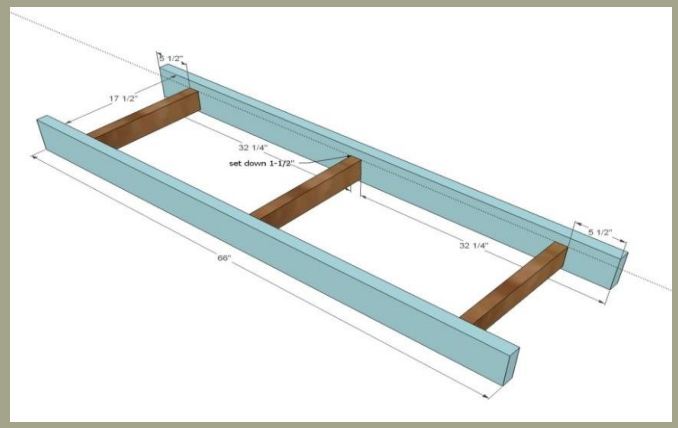
PERGOLA OUTDOOR ROOM



STEP 1



STEP 2



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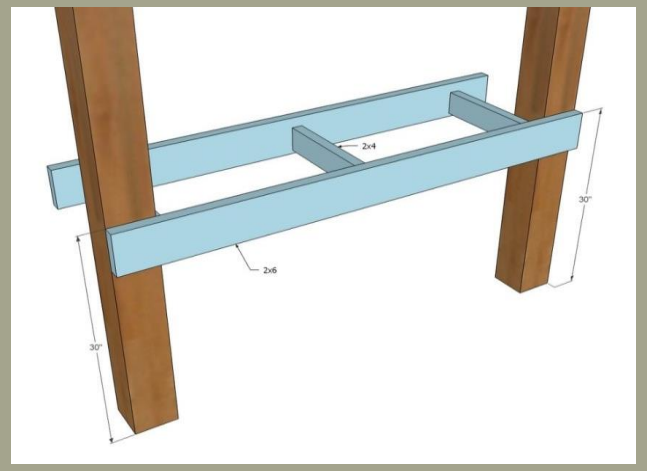
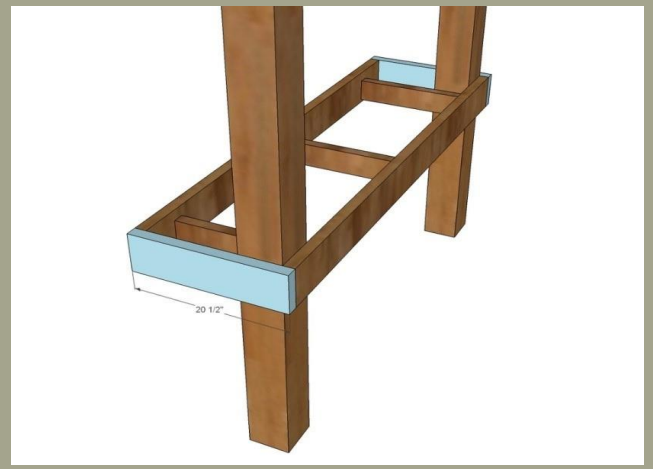


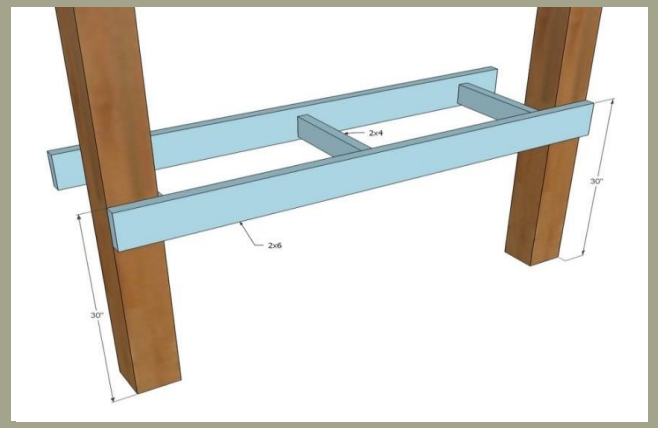
STEP 4



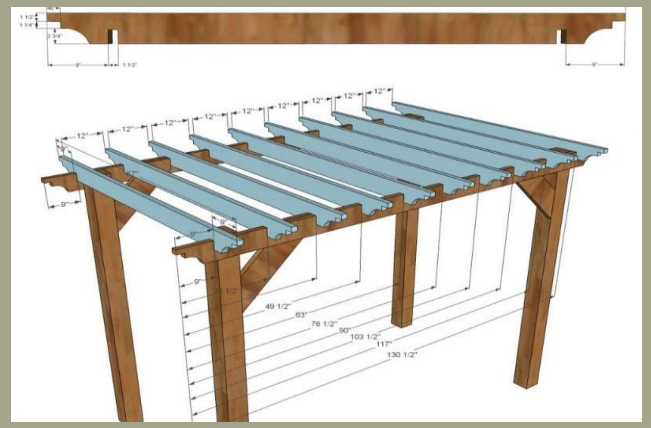
STEP 5

STEP 6

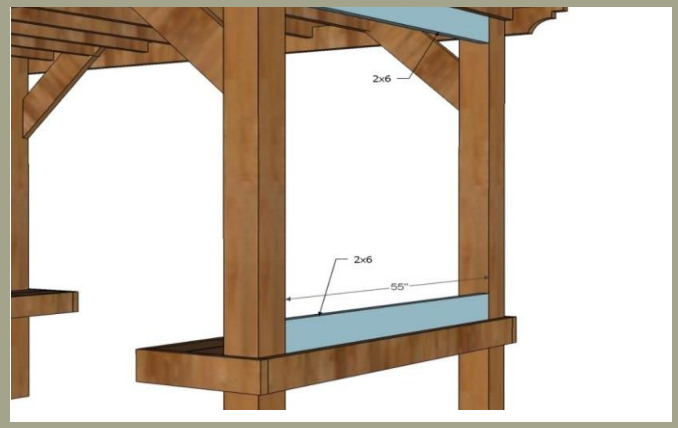
PERGOLA OUTDOOR ROOM



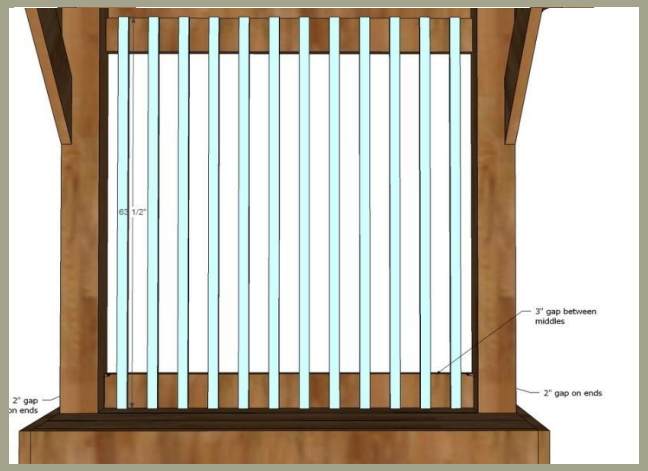
STEP 7



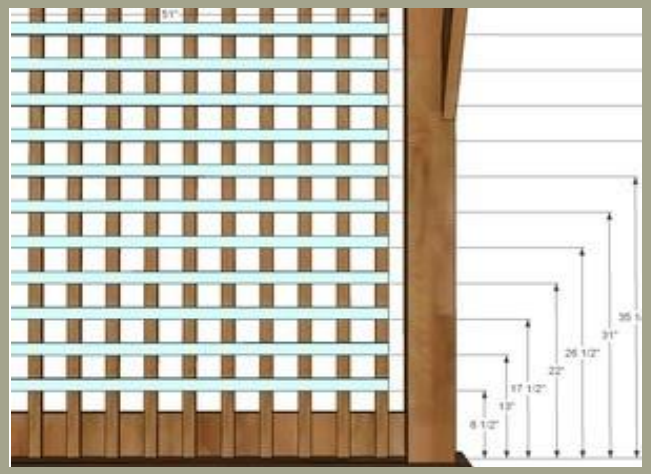
STEP 8



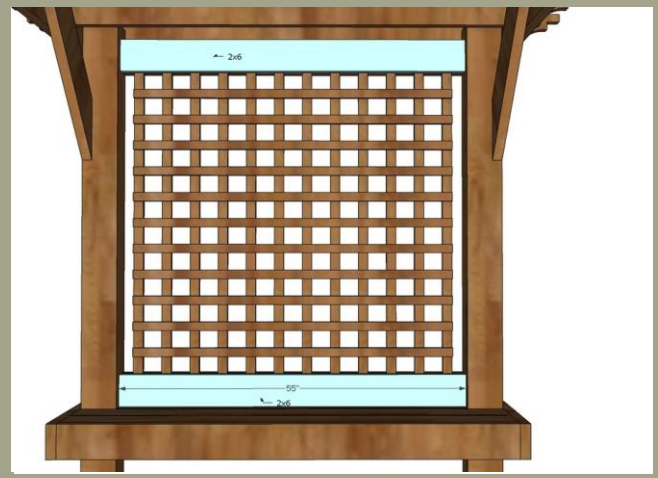
STEP 9



STEP 10



STEP 11



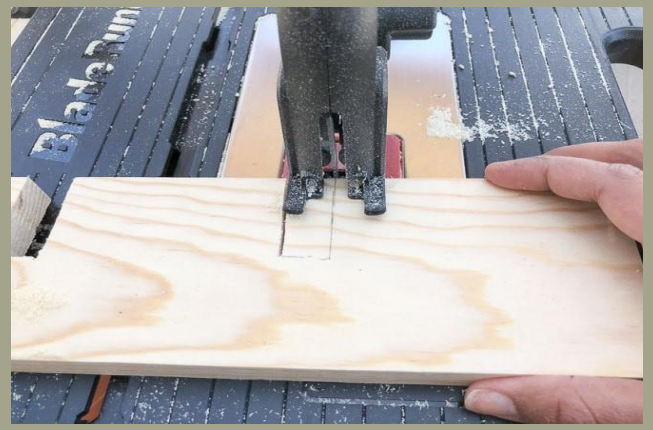
STEP 12

WOODEN CRISS-CROSS RACK

OBJECTIVE OF THE PROJECT

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 .

WOODEN CRISS-CROSS RACK



STEP 1

STEP 2

STEP 3

The crosscuts to cut the boards to length can be done using a miter saw or circular saw.

The students can use a table saw or a jig saw to make the cuts as well – anything that works well for them.

Making the half-lap cuts is the most critical step. All the slots need to be perfectly aligned and square for this to work

STEP 4: Attach Once you have them all configured and ready, use wood glue and put it together. The end pieces are attached with wood glue and finish nails


Ceramics Workshop

Ceramics Workshop

occupational therapist Donna McLeod says, “touching and smelling the clay and hearing the whir of the pottery wheel engages the senses and can lower cortisol, the stress hormone that can be physically and mentally harmful if at a high level too long.”

Description and the vision of the ceramic workshop :

The ceramic workshop is a creative space dedicated to the art and craft of ceramics .

It aims to provide a nurturing environment for individuals to explore and express their artistic abilities through working with clay .

The vision of the ceramic workshop is to foster a community of passionate ceramic artists , enthusiasts , and learners.

The ceramic workshop aims to inspire and encourage creativity, promoting the joy of working with clay as a therapeutic and meditative practice .

It strives to create a supportive and inclusive atmosphere, where people can learn from skilled instructors, collaborate with fellow potters, and share their knowledge and experiences.

Ultimately, the vision of the ceramic workshop is to be a hub of creativity and innovation, where artists can push boundaries, experiment with different techniques, and discover their unique artistic voice.

It seeks to be a place where individuals can discover the beauty of ceramics, discover their own potential, and develop a life long passion for this ancient form of art.

Summary of the Ceramics Workshop

introduction to ceramic art and processes

Students will learn a variety of hand-forming processes, glazing and electric kiln firing. Class projects will allow students to practice technique while developing their personal aesthetic within the realm of ceramics.

Course Objectives

• To develop a working knowledge of design concepts, including form, structure, space, surface, color, proportion, composition and function.
• To learn the technical skills, vocabulary, processes and materials related to using clay as an art material for making pottery and sculpture.
• To explore the creation of personal content in art and how that is conveyed to a viewer.
• To increase knowledge of historical and contemporary practices in ceramic art.
• To develop critical skills for analysis and discussion of art works.

Ceramics workshop plan for a Week :

Day 1: Introduction and Basic Techniques

- Introduce participants to ceramics, its history, and various techniques.
- Teach basic hand-building techniques like pinch pots and coil building.
- Allow participants to practice these techniques by creating small clay vessels or sculptures.

Day 2: Wheel Throwing Basics

- Introduce participants to wheel throwing, including preparing clay and centering it on the wheel.
- Demonstrate how to create basic cylindrical forms like cups, bowls, or vases.
- Provide individual guidance as participants practice wheel throwing.
- Discuss trimming and finishing techniques for wheel-thrown pieces.

Day 3: Surface Decoration

- Teach participants different surface decoration techniques like carving, stamping, and sgraffito.
- Discuss glazes and demonstrate various glaze application methods.
- Allow participants to experiment with different surface decoration techniques on their clay pieces.

Day 4: Glazing and Firing

- Explain the glazing process, including glaze mixing, application, and safety precautions.
- Demonstrate different glazing techniques such as brushing, dipping, and spraying.
- Guide participants in glazing their previously bisque-fired pieces.
- Discuss firing techniques, kiln loading, and firing schedules.

Day 5: Finishing Touches and Reflection

- Help participants in removing their glazed pieces from the kiln.
- Teach them how to refine and add final touches to their ceramic works, like sanding or adding handles.
- Encourage participants to reflect on their journey throughout the workshop.
- Organize an exhibition or showcase where participants can display their finished ceramics.

Agenda

Introduction

The history of ceramics

Basic Techniques

Coiling
Slab Building
Wheel Throwing
Sculpting
Slab Building

Surface decoration techniques

Carving
Stamping
Sgraffito

Introduction and Basic Techniques

The history of ceramics:
Ceramics are a timeless art form that can be seen in almost every culture around the world. They have been used to create everything from dishes to houses for thousands of years, and one of the most popular ways they are still being made today is through ceramic sculpture. The history of this art form goes back centuries, but it has continued to evolve as more artists come up with new techniques and ideas.

The first evidence of human-made ceramics date back to at least 24,000 years BC was found in a settlement near Brno, in the Czech Republic (Country in Europe). The first evidences of pottery use appeared in Asia several thousand years later (in China).

Many beautiful stone vessels were created before the invention of pottery in Western Asia (about 7,000 BC) and agriculture. Between 12,000 and 9,500 BC, the Natufian people developed exquisite stone mortars. Around 8000 BC, several early towns specialized in creating stunning and highly technical stone containers out of materials like alabaster or granite with sand to polish them.

Artisans enhanced the artwork's aesthetic effect by using the material's veins. Such items have been discovered in great numbers along the upper Euphrates River in what is now eastern Syria, particularly near Bouqras.

During the Third Millennium BCE, people started making pots according to a method known as "coiling." This process, which molded clay into a long strand that wrapped around it to form smooth walls, was first used to make early pots during this period. The potter's wheel arrived in the New World too late for European explorers; it wasn't discovered there until they arrived.

Embossing was used to decorate the clay, which started as geometric but often incorporated allegorical designs from the beginning.

The history of ceramics in the Middle East begins with an early, preliterate Neolithic culture that produced pottery at the cusp of the Uruk period (4000 to 3000 BC). Archaeological evidence tells us that this region is where ceramic making began -in fact, it was here that humans first started using clay as a raw material for pots and other containers.

The earliest known examples were found just outside present-day Tehran, Iran around 8000-6000 BCE. These artifacts are now part of the National Museum of Iran's collection on display today!

At Susa dating back to before 2900 B.C., shards of pottery were found which belonged to the Proto-literate period (between 3500 and 3000 BC).

The history of ceramic art in Mesopotamia began with settlements like Uruk where they first started using clay as a raw material for pots and other containers.

- **Student Learning Outcomes:**
- At the conclusion of this course students should be able to demonstrate the following:
- knowledge of the world art history of ceramics
- knowledge of contemporary ceramics in the United States
- the ability to successfully manipulate clay through the basic hand building techniques of coil, pinch, and slab
- the ability to successfully manipulate clay on the potters wheel
- the ability to embellish the surface in an expressive and meaningful way using slips and glazes
- the ability to safely load and unload ceramic objects in both electric and gas kilns
- the ability to discuss, in an articulate, thoughtful manner during class critiques, the meaning, design, and technical processes used to create ceramic art objects

Core Curriculum Learning Objectives and Assessment Methods

- Critical Thinking: Students will demonstrate the ability to synthesize varied sources of information, acknowledge the contributions/insights of others, and make independent judgments. Assessment: Students will take historical and contemporary source material from the history of ceramics and synthesize these sources of inspiration into their own unique design. The design will then be executed by learning forming and finishing techniques. The completed project will be discussed and evaluated at a group critique.
- Communication: Student communication will be clear, purposeful, and make appropriate use of evidence, data and technology as applicable. Assessment: The objective critique of work in progress and in its finished form provides the opportunity for the student to develop their critical and expressive abilities in the discussion of their own work and the work of other class members. Critiques offer the opportunity to develop their communication skills in using the vocabulary of the elements and principles of visual expression.
- Teamwork: Students will be able to work together toward a shared purpose relevant to the course/discipline and with a sense of shared responsibility for meeting that purpose. Assessment: Students will engage in group activities in the studio such as mixing clay and glazes and loading and unloading kilns. Group critique sessions of finished work will advance each individual's understanding of how technical and conceptual goals are met in the production of art.
- Social Responsibility: Students will recognize and understand the roles of diversity in society. Assessment: Through the sharing of facilities, work spaces, and equipment, students will understand their interconnectedness as a group and the necessity for cooperation. The individual's participation in the group and the demonstration of the individual's sense of responsibility towards the facility and equipment is assessed throughout the semester by the instructor.

Basic Techniques

Ceramics is a versatile art form that involves shaping clay into various objects and then firing them to create durable and decorative pieces. Here are some basic techniques used in ceramics:

1. Pinching: This is one of the oldest and simplest techniques. It involves shaping clay by pinching and manipulating it with your fingers to create a desired form.

2. Coiling: Coiling involves rolling out small ropes of clay and then stacking or spiraling them to build up a form. By smoothing and blending the coils together, you can create vessels and sculptures.

3. Slab Building: Slab building is done by rolling out even, flat pieces of clay called slabs. These slabs can be used to construct various forms by joining them together using scoring (scratching the clay's surface) and slip (a mixture of clay and water).

4. Wheel Throwing: Wheel throwing is a technique where a potter uses a potter's wheel to create symmetrical vessels. By centering clay on the spinning wheel, a potter can shape and mold the clay using their hands and various tools.

5. Sculpting: Sculpting involves manipulating clay to create three-dimensional forms, such as statues and figurines. It often involves a combination of techniques like pinching, coiling, and slab building.

6. Glazing: Once the clay piece has been dried and fired, glazing can be applied. Glazes are liquid mixtures of minerals that add color, texture, and a protective layer to the ceramic surface. They can be applied through brushing, dipping, or spraying.

STEPS IN THE CERAMIC PROCESS

CLAY PREPARATION

The first step in working in ceramics is the finding of a plastic clay body. In the past, potters had to dig their own clay from locally available sources as there were no other options. Some potters still dig their own clay and feel a valuable connection to the earth through this process. Native American potters of the Southwest traditionally make an offering for the clay they take from the earth to use for their pots. This process is quite labor intensive and is very difficult for urban potters today. Most buy commercially available clay bodies from one of the many ceramic suppliers in the area they live as shipping costs for something as heavy as clay can become expensive.

WEDGING

Wedging is the process of mixing the clay by hand by rotating and pressing a clay ball on a table. The purpose is to thoroughly homogenize the clay and to remove all air bubbles. This is particularly important, as the presence of air bubbles in the clay will result in explosions in the kiln as the air pockets expand and burst. Your work is ruined, as is any piece near yours in the kiln. You will know if there is air in your clay if you see holes, like in Swiss cheese, when you slice through the clay with a wire.

FORMING

After the clay has been thoroughly wedged, it may be formed by a variety of methods: slab, wheel, coil, pinch, and mold. These methods may be combined, or used singly. In this class, we will explore slab and wheel.

DRYING

When the clay bag is opened, the drying process begins. As clay dries, it loses water, becomes stiffer, and shrinkage begins. After forming, pieces you create should be wrapped in soft sheets of plastic (without holes) and placed on the shelves in the DAMP ROOM. The plastic will slow down (but not stop) the drying process, to ensure that when you return several days later, your pieces will still be workable. Be very careful as you wrap your work in plastic as you can distort the pieces easily. Be very, very careful in placing your work on the shelves in the damp room because you can easily destroy the work of other students. I recommend you write your name on the plastic so you can easily recognize your own work. Do not lift the plastic from the work of other students. This can distort or ruin their work also. If you need plastic, ask me for it. Under no conditions should you take plastic from another student's work. This will dry their work too fast, possibly causing cracking, and not allow them to continue working on a piece. Should you be caught doing this, you will be dropped from class immediately!

STEPS IN THE CERAMIC PROCESS

LEATHERHARD

After your pieces have dried for a few days in the damp room in plastic, they will reach of stage of partial dryness referred to as leatherhard. This stage of drying is characterized by a loss of water through evaporation that results in the clay's stiffening and losing some flexibility. This is an excellent time to refine the piece: carving excess clay, adding handles or decorative elements, trimming the footring of a bowl, etc. This is the last chance you have to change the shape of the piece! It is very important that you be able to recognize this stage. Once the clay has dried beyond this point no further shape changes can be accomplished.

GREENWARE

When a piece of pottery has dried completely it is referred to as a piece of greenware. This means it has lost all water through evaporation and has no flexibility. Bending it will break it. You cannot add anything to it. You cannot carve anything from it. You cannot do anything to it except break it! This is purely a passive state for the clay awaiting the first firing. After you have finished work on a piece, you must carry it from the damp room and place it carefully on the greenware racks. The work will remain there until enough pieces have accumulated to fill a kiln. Only work on the greenware carts will be fired; work left in the damp room will not be fired. EVER. It will simply sit in the damp room all semester. You must carry pieces to the greenware carts in order for them to be fired

GLAZING

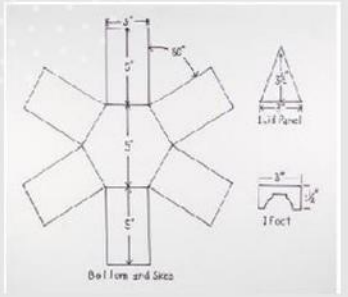
Now the glazing process can begin. The glaze, a mixture of ground glass, clays, coloring materials and water, is applied to the bisque pot by dipping, pouring, spraying, brushing, sponging, or some combination of these techniques. The footring of each piece must be free of glaze and the pot glued to a bisque fired 'cookie' made from a stoneware clay body. Pots are then placed on the glaze racks. The glazed pots accumulate until enough are there to fill a kiln.

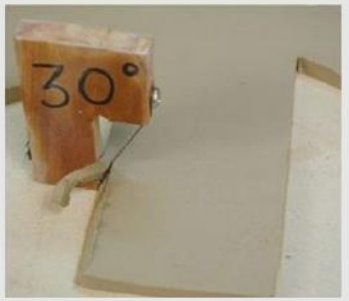
GLAZE FIRING

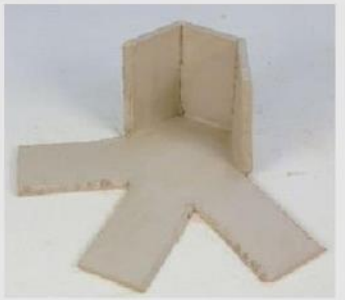
Again, the firing process is a three day affair. After the glaze firing temperature of 2350 degrees F. has been reached, the pots cool, and on day three, are unloaded and stored in the room in the wooden cabinet near my office. Once the ware is out of the kiln, we recommend you promptly take it home or store it in your locker. We do not have the storage room to warehouse all the work that will be produced! Remember, unsigned work will not be fired. This is the final step in the process for the vast majority of pieces produced. However, there is one final, optional procedure:

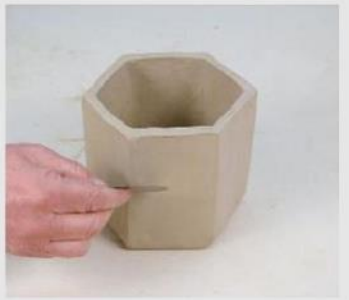
Coiling

Slab Building:









Wheel Throwing:

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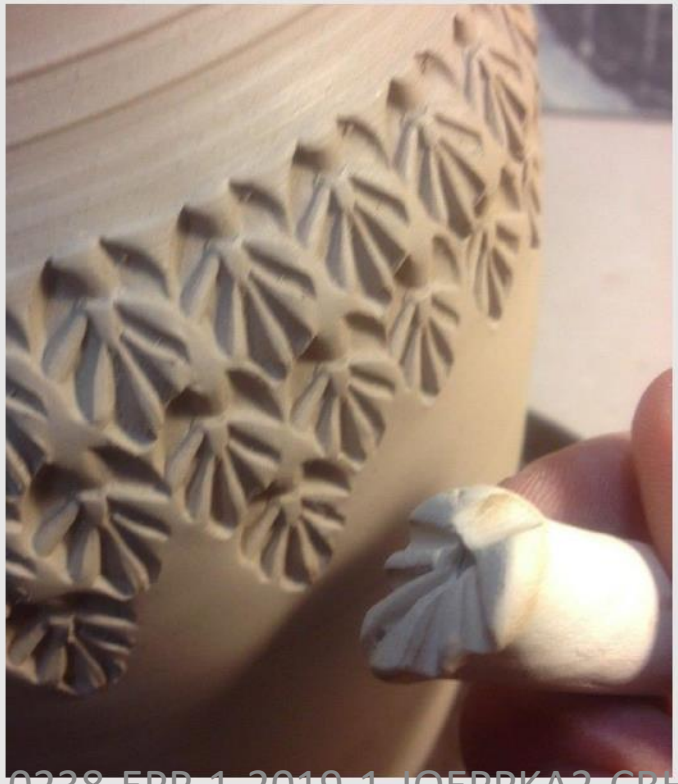
Sculpting:

Slab Building:

Surface decoration techniques.

Carving

Stamping



Sgraffito

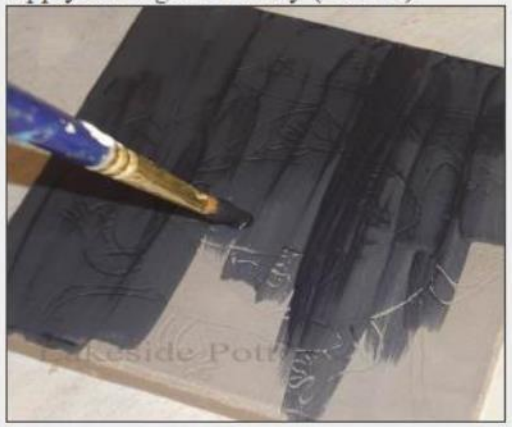
Sgraffito (in Italian "to scratch") is a decorating pottery technique produced by applying layers of color or colors (underglazes or colored slips) to leather hard pottery and then scratching off parts of the layer(s) to create contrasting images, patterns and texture and reveal the clay color underneath.

Sgraffito

Design pattern on tracing paper

Trace pattern on clay with pencil

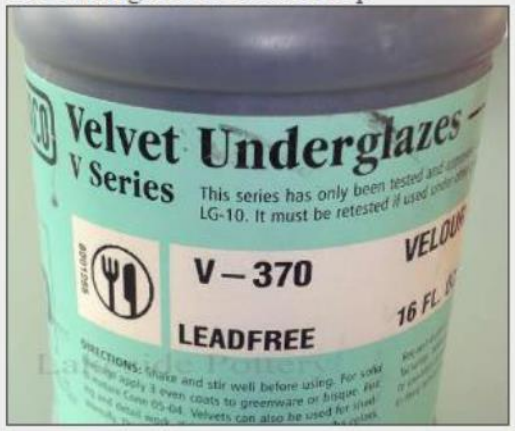
Apply underglaze evenly (2 coats)



Insure tracings can be seen

Lift tracing paper and verify

Use underglaze or colored slip



Remove color where desired

Unwanted colored areas removed

glazing techniques

Brushing

Advantages of Brushing	Disadvantages of Brushing
1. Able to cover large areas with small amounts of glaze.	1. Likely to be streaky.
2. Good for fragile or once-fired pieces.	2. Bisque-fired ware sucks the liquid from the brush.
3. Good for details on decorative pieces or overlapping areas.	3. A very slow method of glazing.

Dipping

Advantages of Dipping	Disadvantages of Dipping
1. Ease of application.	1. Large volume of glaze needed.
2. Evenness of coating.	
3. Speed of application.	

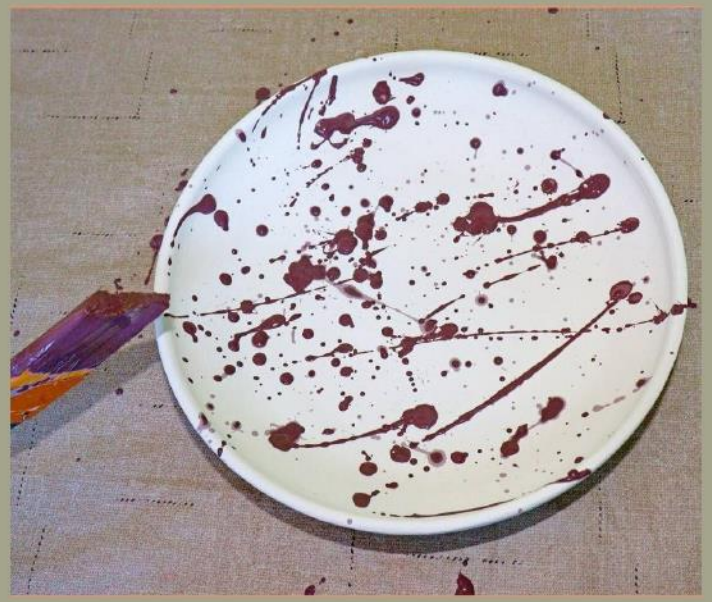
Pouring

Advantages of Pouring	Disadvantages of Pouring
1. Small amounts of glaze may be used.	1. Likely to be uneven, with glaze runs.
2. Speedy and free decoration techniques.	

Spraying

Advantages of Spraying	Disadvantages of Spraying
1. Ease of handling, particularly for once-fired work or work of a fragile nature.	1. Atmospheric pollution and respiratory health hazards.
2. Elimination of glaze runs and overlapping in the unfired glaze.	2. Wastage of materials.
3. Ease of color gradation.	3. Cost of equipment.
4. Small amount of glaze required.	4. Equipment maintenance.
	5. Difficulty of spray control, except in more expensive units.
	6. Difficulty in gauging correct thickness.
	7. Need for masking in pattern control.

Spattering



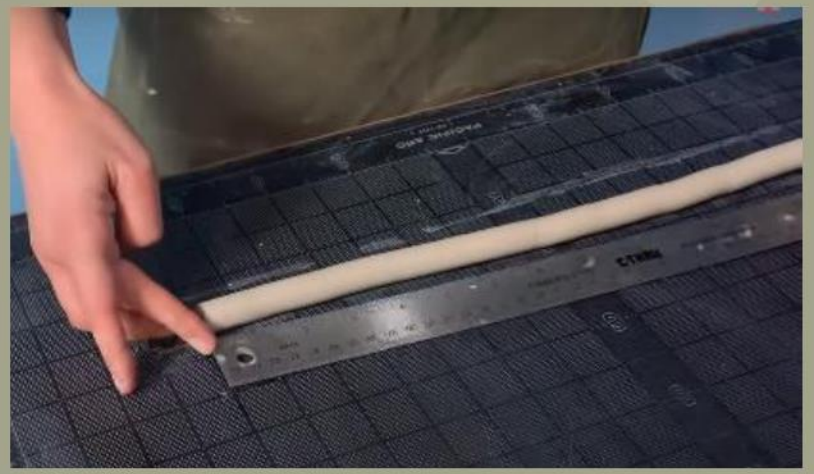
Sponging

Trailing

Making Ceramic Decorative Beads

The simplest pottery idea of all, and a great way to introduce students to the hobby, is to just make beads.

https://www.google.com/search?q=making+ceramic+Decorative+Beads&source=lmns&bih=931&biw=1920&hl=en&sa=X&ved=2ahUKEwjwp_fUkcuAAxVXWaQEHY6tCmUQ0pQJKAB6BAgBEAI#fpstate=ive&vld=cid:ea0711ff,vid:p0t-sa2ckbg



1- Make a long piece of clay

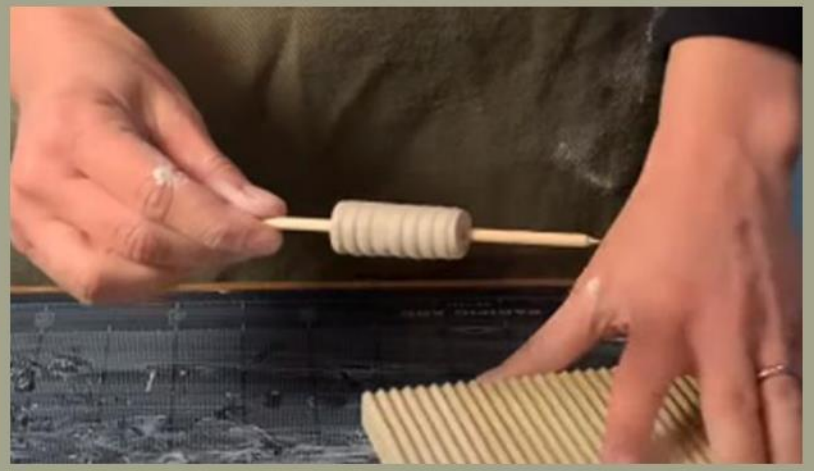
2- Cut it into pieces of equal length

3- Drawing on it using a needle or using a zigzag surface to create the texture

4- To create beads in the form of balls, we cut other pieces

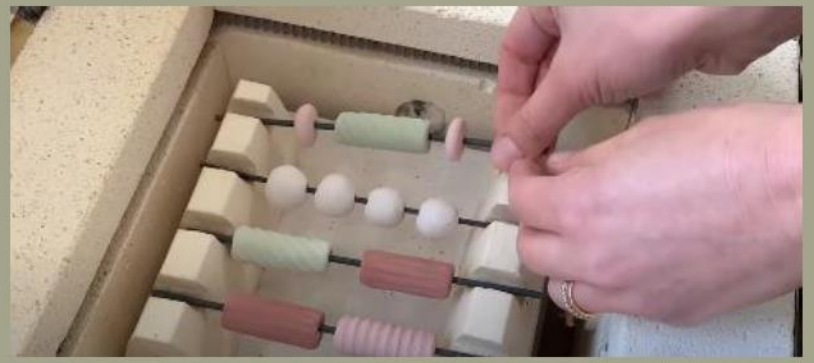
5- Then roll the pieces using the palm of your hand to form balls

6- using bamboo sticks to poke a hole through the middle



7- Let it dry, then put it in the oven, and after taking it out, gently wipe it with a wet sponge

8- Use bake-on ceramic paint markers or bake-on epoxy



9- After it dries, it is placed in the oven again

Try making other shapes:

Making spoons

https://youtu.be/ymcHin1-krs

1

2

3

4

5

6

7

8

9

Try making other shapes:

Zillij , Gypsum Carving , Pottery , Resin Workshop

Zillij , Gypsum Carving , Pottery , Resin

"Gypsum carving and pottery: Two crafts, one earth, endless creativity."

Zillij

is a time-honored art of mosaic tiles of geometric pottery shapes hammered piece by piece mounted in a plaster panel. This type of Islamic art developed in Andalusia and the Maghreb, and is one of the most important characteristics of Maghreb architecture. It consists of geometric mosaics pattern, for decorating walls, ceilings, windows, sidewalks, swimming pools and tables.

Materials You'll Need:

1.Ceramic tiles in various colors
2.Tile cutting tools (such as nippers)
3.Cement or adhesive for tile installation
4.Grout
5.Templates or stencils for geometric patterns
6.Pencil or chalk for marking the patterns
7.Tile spacers (optional)
8.Tile saw (for more precise cuts, if necessary)
9.Safety goggles and gloves

Zillij

Steps:

1.Design the Pattern: Begin by selecting a geometric pattern for your Zillij design. Traditional patterns often feature star shapes, polygons, and interlocking designs. You can find templates or stencils online or create your own.

2.Prepare the Tiles: Select ceramic tiles in various colors that match your chosen design. You'll need to cut these tiles into smaller pieces to fit the pattern. Use tile cutting tools or a tile saw for more precise cuts. Wear safety goggles and gloves to protect yourself.

3.Mark the Pattern: Lay out your design on a flat surface, such as a piece of plywood or a tabletop. Use a pencil or chalk to mark the pattern directly on the surface. This will serve as your guide for tile placement.

4.Tile Placement: Begin placing the cut ceramic tiles onto the marked pattern. Arrange them according to your design, making sure the edges of the tiles meet closely to create the desired geometric shapes. If needed, use tile spacers to maintain even gaps between tiles.

5.Adhesive Application: Once you're satisfied with the tile arrangement, carefully lift each tile and apply adhesive to the back using a trowel. Then, press the tile back into its place on the pattern.

6.Grouting: After the adhesive has set and the tiles are securely in place, you can begin grouting. Mix grout according to the manufacturer's instructions and apply it between the tiles, filling in the gaps. Use a rubber float or your fingers to press the grout firmly into the spaces. Wipe away excess grout from the surface of the tiles with a damp sponge.

7.Cleaning and Sealing: Allow the grout to dry for the recommended time, typically 24-48 hours. After it has fully cured, clean the tiles with a damp cloth to remove any remaining grout haze. Once the tiles are clean and dry, you can apply a sealer to protect the Zillij and enhance its colors and shine.

8.Installation: If you're creating Zillij for an architectural element like a wall or floor, you'll need to install the completed design using the appropriate adhesive and technique. Follow the installation guidelines for your specific project.

Creating Zillij can be a time-consuming and intricate process, but the results are stunning and worth the effort. It's important to plan your design carefully and work patiently to achieve the desired geometric patterns and aesthetic.

Brass

Brass is uniquely suited for the production of lamps, trays, and door ornaments. Students learn the techniques of working with brass: its shaping, engraving, chiseling, and piercing. Working with the core arts of geometry, calligraphy, and biomorphic florals, students design functional objects capable of carrying the high meaning and symbolism of Islam.

Brass is a metal alloy composed primarily of copper and zinc. It is known for its bright gold-like appearance, corrosion resistance, and durability, and is commonly used in a wide range of applications, including jewelry, decorative objects, musical instruments, plumbing fixtures, and electrical components. The exact composition of brass can vary depending on the intended use, with different amounts of copper and zinc, as well as other metals, such as lead, tin, or nickel, added to achieve specific properties or characteristics.

Brass can be formed and shaped in a variety of ways, including casting, forging, and machining. It can also be polished to a high shine, or treated with various coatings or patinas to achieve a different look or finish.

One of the advantages of brass is that it is relatively easy to work with, due to its low melting point and malleability. This makes it a popular choice for both amateur and professional metalworkers, as well as for mass production in industrial settings.

Brass has also been used in decorative arts for centuries, with examples of brass objects dating back to ancient civilizations such as the Egyptians and Romans. Today, brass continues to be a popular choice for decorative objects and architectural elements, due to its beauty, versatility, and durability.

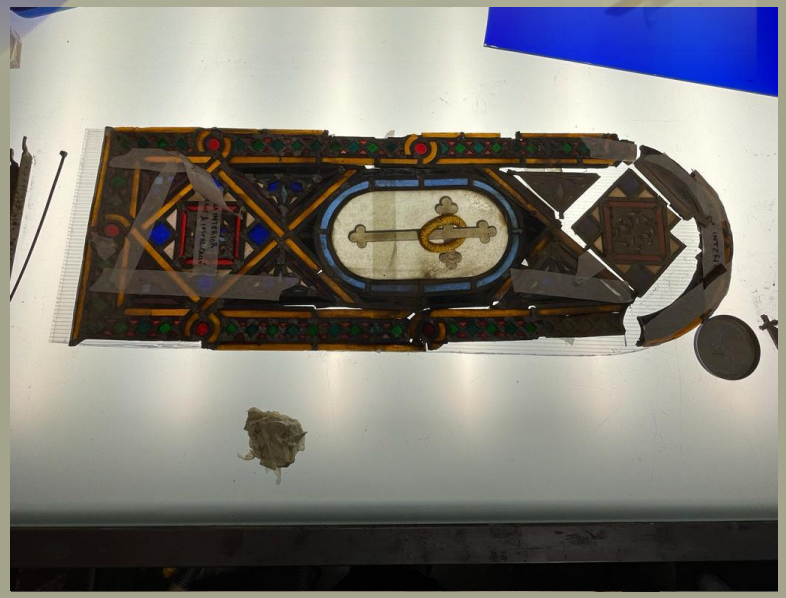
Gypsum Carving

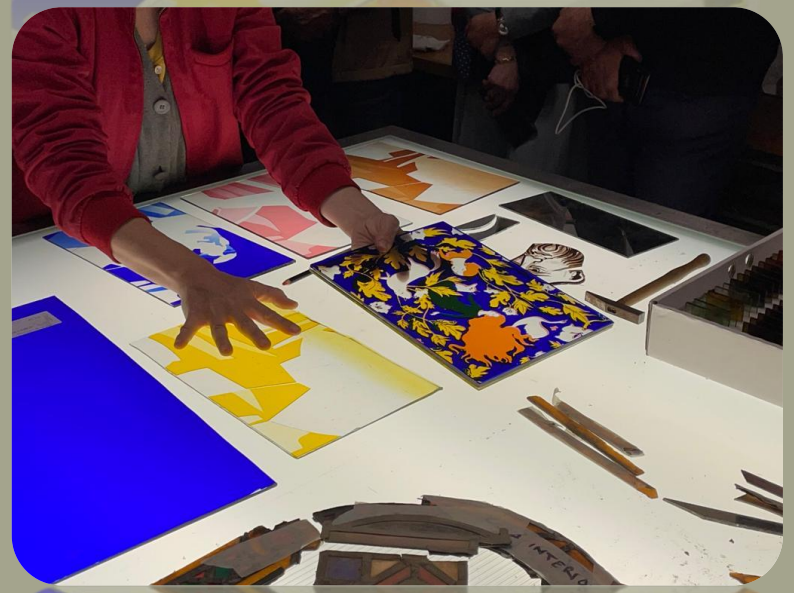
Gypsum is formed and poured and geometric decorations are made in it and colored glass is placed inside this work gives a high sensory value and a calm light light on the place when it is highlighted

After theoretical and practical applications on paper, these ideas are merged and transformed into a product that can be used in practical life.

Students create geometrical designs and then learn to work them in gypsum-colored glass inlay, using the techniques of color selection, glass cutting, plasterwork, and installation of brilliant windows.

THE APPLIED ARTS





Gypsum Carving

One of the examples of how to develop the student was through the perception of a certain idea with gypsum and its practical application, and one of these examples was the manufacture of a pot or a large dish with handmade floral motifs and then placed in a convection oven.

Gypsum carving is a delicate process that requires a high level of skill and precision. The softness of the material makes it easy to carve, but also makes it vulnerable to breakage. Additionally, gypsum is susceptible to moisture and humidity, which can cause it to deteriorate over time. Despite these challenges, gypsum carving remains a popular art form today, used for everything from architectural ornamentation to small decorative objects. The intricate and detailed designs that can be achieved through gypsum carving make it a unique and visually striking medium.

Gypsum Carving

STUDENTS' WORK

THE APPLIED ARTS

THE APPLIED ARTS

THE APPLIED ARTS

Pottery

1-Pottery refers to the process of creating ceramic objects by molding, shaping, and firing clay. It is one of the oldest and most widespread art forms, with evidence of pottery dating back to at least 20,000 years ago. Pottery can be used for a wide range of functional and decorative purposes, including plates, bowls, vases, figurines, and tiles.

2-The process of making pottery typically involves several steps. First, the raw clay is gathered and prepared by removing any impurities and kneading it to achieve a uniform consistency. Next, the clay is molded into the desired shape, either by hand or using a potter's wheel. The object is then allowed to dry, which may take several days depending on the size and thickness of the clay.

3-Once the clay has dried, it is fired in a kiln at high temperatures to harden it and create a durable ceramic object. Depending on the type of clay and the desired effect, the firing may be done at low or high temperatures, with or without glazes or other decorative elements.

4-Pottery can be created using a wide range of techniques and styles, from traditional hand-building and throwing techniques to more contemporary and experimental approaches. Some of the most well-known pottery styles include Chinese porcelain, Greek black-figure pottery, and Native American coil pottery.

5-In addition to being a popular art form, pottery has also been used for functional purposes throughout history, such as for storing food and water, cooking vessels, and as building materials. Today, pottery continues to be a popular art form and is enjoyed by artists and collectors around the world.

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Pottery


CENTRO
CERAMICO
SPERIMENTALE
CENTRO
CERAMICO
SPERIMENTALE
COLOROBBIA

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Acrylic resin Carving

The student puts the resin material on pre-manufactured vaults, during the casting period, some elements such as coffee beans, dried roses or other materials can be used to give an aesthetic to the piece to be manufactured, then leave a period of time to become solid and give the final shape of the piece

Acrylic resin carving offers a range of creative possibilities, as the material can be shaped and molded into a wide variety of forms and designs. Additionally, acrylic resin is lightweight and shatter-resistant, making it a practical choice for sculptures or other objects that may be moved or transported frequently.
However, working with acrylic resin also requires some specialized tools and techniques, as the material can be difficult to cut and shape. As with any type of carving, a high level of skill and experience is required to achieve the desired results.

UV printer

A UV printer is a type of digital inkjet printer that uses ultraviolet (UV) light to cure or dry the ink as it is printed onto a surface. Unlike traditional inkjet printers, which rely on evaporation to dry the ink, UV printers use a UV lamp or LED light source to instantly cure the ink as it is applied to the substrate.

The use of UV light allows for faster printing speeds and better ink adhesion, as the ink is instantly cured and locked onto the surface of the substrate. This results in brighter colors, sharper images, and more durable prints that are resistant to fading, scratching, and other types of damage.

UV printers can print on a wide range of materials, including paper, plastic, metal, glass, ceramics, and even textiles. This versatility makes them a popular choice for a variety of applications, such as signage, packaging, promotional items, and product labeling.

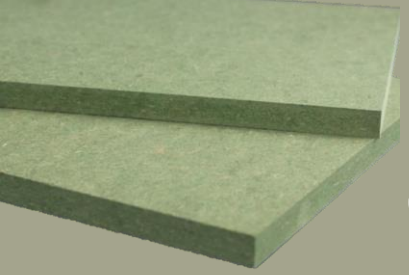
In addition, UV printers are also capable of printing on three-dimensional objects, such as bottles, cups, and other cylindrical or curved surfaces, using a rotary attachment. This makes them a popular choice for printing on promotional items, personalized gifts, and other types of branded merchandise.

UV printers come in a range of sizes and configurations, from small tabletop models to large industrial machines. Some UV printers also offer additional features, such as white ink printing, spot varnish effects, and raised printing for added texture and dimensionality.

UV printer

The student designs a specific design using design programs such as **PHOTOSHOP** or **IIIUSTRATOR**, then we transfer the design to a special program for the printer, then the printer prints the design on canvas, wood, acrylic, paper, etc.

The principle of the work of the printer depends on three basic heads to give the color, the first head gives the main colors of the **CMYK** printer the color of Cyan, magenta, yellow and black, and the second head is to give the white color, which is the basis for giving thickness and background to the colors, while the third head is to give the varnish material This material works to make a shine for the design

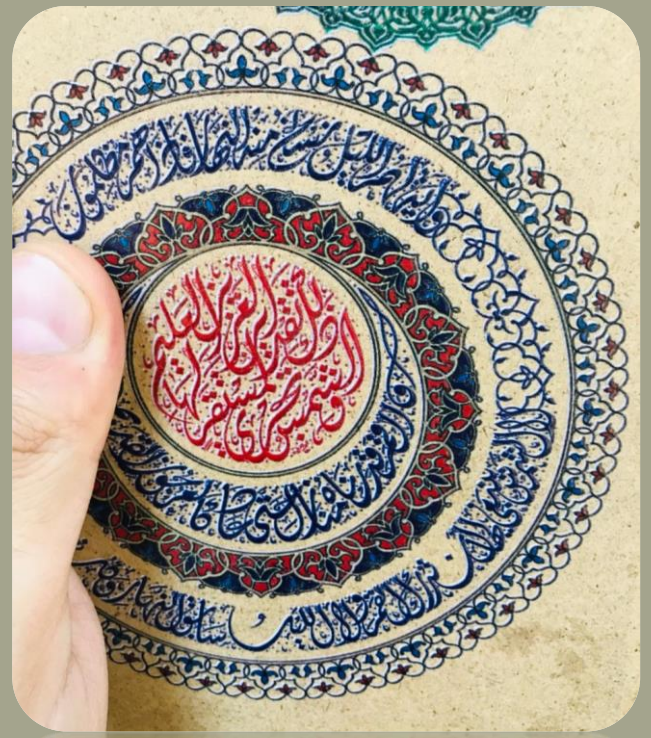


Green HDF Wood

Examples of materials used for UV Printing

MDF Wood

Examples of materials used for UV Printing

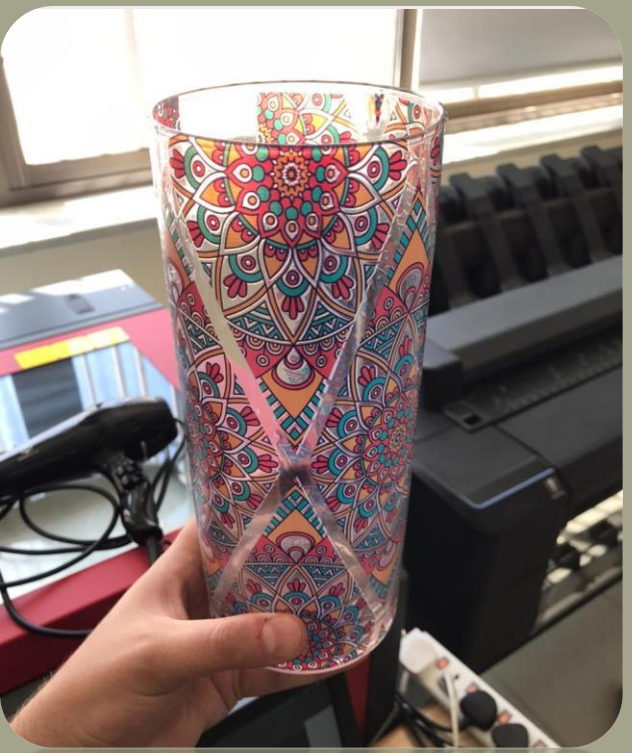


ACRYLIC PLASTIC SHEETS

Examples of materials used for UV Printing

cylinder glass

Examples of materials used for UV Printing

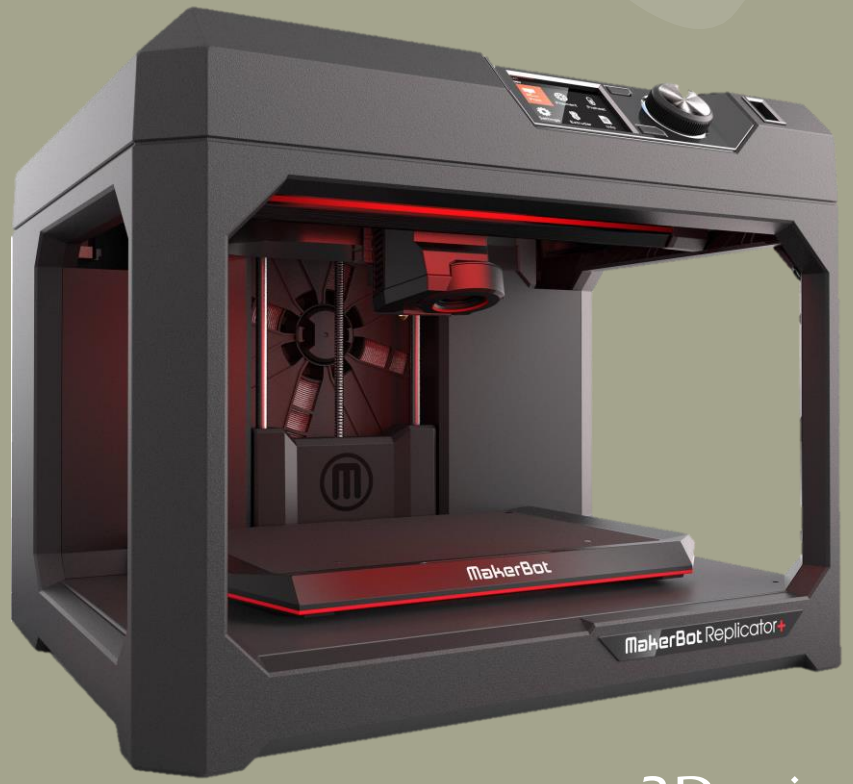


canvas fabric cloth

Examples of materials used for UV Printing

THE APPLIED ARTS

UV printer

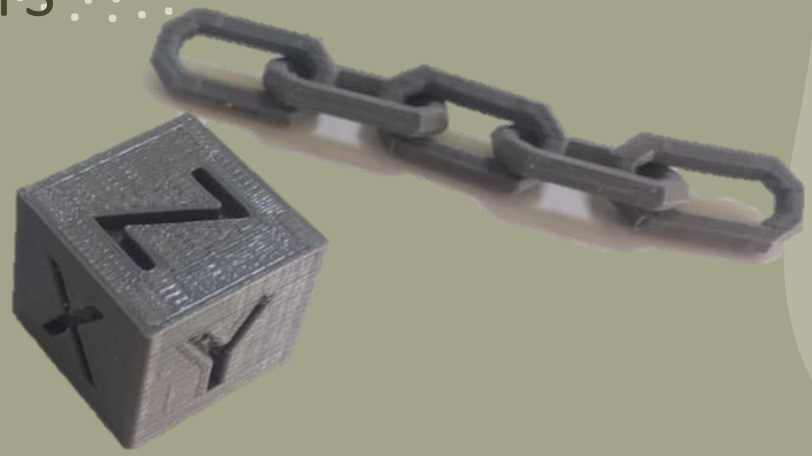


3D printer

3D printer modeling refers to the process of creating a digital 3D model that can be printed using a 3D printer. This modeling process is essential for producing physical objects through additive manufacturing. Here are the key steps and considerations involved in 3D printer modeling:

1.Design Concept: Begin by defining the purpose and design concept of the object you want to create. Consider factors such as size, shape, functionality, and any specific requirements or constraints.

2.Select Modeling Software: Choose a 3D modeling software program that suits your needs and skill level. Some popular options include Autodesk Fusion 360, Blender, Tinkercad, SolidWorks, and Rhino. There are both free and paid software options available, with varying levels of complexity.



3D Print Architectural Models

Since the age of the Pharaohs, architectural models have served as physical representations during structures' development to help sell a project, support fundraising efforts, and solve construction challenges.

Traditionally, model-making is a manual craft that involves working with materials such as wood, ceramic, cardboard, or clay, which can be extremely time-consuming and repetitive. Architecture studios and practices today have access to a wider range of tools, including CNC milling machines, laser cutters, and 3D printers that can reduce labor needs and speed up the workflow.

Modern 3D printing processes provide architects and model makers with the means to revolutionize how models are made. They do this by:

- Speeding up the architectural model making process.
- Translating CAD drawing directly into physical 3D models with a high level of precision.
- Developing intricately designed parts that'd be hard or impossible to produce by hand.
- Simplify communication and showcase specific areas that would be hard to convey through conventional 2D drawings.
- Creating more design iterations at reduced production costs.

For example, model makers Renzo Piano Building Workshop (RPBW), founded by the Pritzker Prize laureate architect, use an SLA 3D printer to quickly develop and fabricate accurate models. "Our models change every day or even every hour. Because the architects change the project very quickly, most of the time, we don't have enough time to do it by hand. Therefore, we have to find a way to do it quicker," said Francesco Terranova, model maker at RPBW.

3D printers can create models within a few hours and even operate overnight to save time. "The good thing is that we can launch the printer in the night, and when we come back in the morning, we find the model done. This way, we don't lose time during the day," said Mr. Terranova.

Virtual reality (VR)

Virtual reality (VR) is a simulated experience that employs pose tracking and 3D near-eye displays to give the user an immersive feel of a virtual world. Applications of virtual reality include entertainment (particularly video games), education (such as medical or military training) and business (such as virtual meetings). Other distinct types of VR-style technology include augmented reality and mixed reality, sometimes referred to as extended reality or XR, although definitions are currently changing due to the nascence of the industry

Currently, standard virtual reality systems use either virtual reality headsets or multi-projected environments to generate some realistic images, sounds and other sensations that simulate a user's physical presence in a virtual environment. A person using virtual reality equipment is able to look around the artificial world, move around in it, and interact with virtual features or items. The effect is commonly created by VR headsets consisting of a head-mounted display with a small screen in front of the eyes, but can also be created through specially designed rooms with multiple large screens. Virtual reality typically incorporates auditory and video feedback, but may also allow other types of sensory and force feedback through haptic technology.

THE APPLIED ARTS

Fashion Design Workshop

Fashion Design Workshop

"A fashion design workshop is where threads of creativity are woven into the fabric of innovation, and every stitch tells a story of style and self-expression."

Fashion Design Workshop

The Sampling Process

Fashion design is a form of art dedicated to the creation of clothing and other lifestyle accessories. Modern fashion design is divided into two basic categories: haute couture and ready-to-wear. The haute couture collection is dedicated to certain customers and is custom sized to fit these customers exactly. In order to qualify as a haute couture house, a designer has to be part of the Syndical Chamber for Haute Couture and show a new collection twice a year presenting a minimum of 35 different outfits each time.

Ready-to-wear collections are standard sized, not custom made, so they are more suitable for large production runs. They are also split into two categories: designer/createur and confection collections. Designer collections have a higher quality and finish as well as an unique design. They often represent a certain philosophy and are created to make a statement rather than for sale. Both ready-to-wear and haute-couture collections are presented on international catwalks.

Who Invented It?

The first fashion designer who was more than a simple seamster was Charles Frederick Worth, in the 19th century. Before he set up his fashion design house in Paris, clothing was made by anonymous dressmakers and fashion standards were derived from the styles worn by royalty. Worth was the first designer to actually dictate to his customers what to wear rather than following their demands.

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His fashion house became so famous that people were able to attach a face and a name to designs when they knew they were from the House of Worth. This was the beginning of the tradition to have a designer of a house not only create clothing, but also represent the symbol of the brand.

What Does It Take To Be A Fashion Designer?

Fashion design is a form of art. To work as a designer, you should have an artistic and creative personality. You also have to be good at drawing and able to express your ideas in sketches. You don't necessarily have to be a great artist, but you must have some special skills for combining colors, tones and shades. You also have to be able to work with fabric and use textiles in a creative and original manner. Fashion designers have a good visual imagination and are able to think in three-dimensions and put their ideas into garments.

Fashion designers have to be aware of the fashion market requirements. They have to be very interested in learning new things and read magazines, journals and books on fashion design history and new trends. They also have to be interested in art, visit art galleries and interact with all kinds of artists whenever they have the opportunity. A designer should also have some knowledge and experience of tailoring (cutting, draping, sewing etc.) and be able to tell the difference between different fabric quality levels.

A good understanding of the audience's lifestyle and customer needs and requirements is also needed in fashion design. Designers should have good communication skills and be able to express their ideas clearly. But most important, they have to be very original and have fresh, innovative ideas.

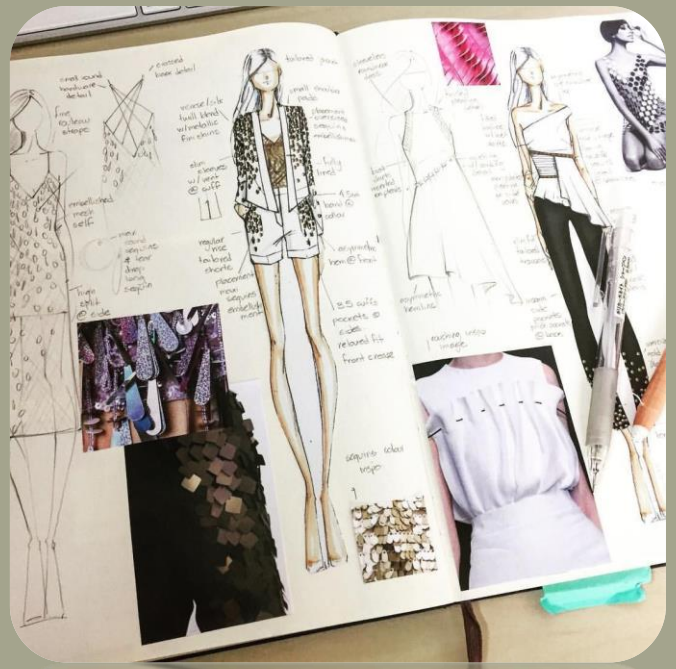
The Sampling Process

So, what is the Design Process? This is the process for every garment from idea to production. Of course, there may be some extra steps along the way for specific styles or in some cases steps may even be skipped for an established brand, but let's keep it simple and break down the process into 9 steps. Remember, every company is unique, so you can take these steps and morph them into whatever works best for YOU and YOUR BRAND

Here are the 9 steps involved in the Design Process:

1.Mood Board / Ideation / Inspiration
2.Fashion Illustration / Sketches
3.Technical Sketches
4.Tech Pack
5.Sourcing
6.Sampling
7.Fit & Review
8.Design Approval
9.Production

The Sampling Process



STEP 1: MOOD BOARD / IDEATION / INSPIRATION

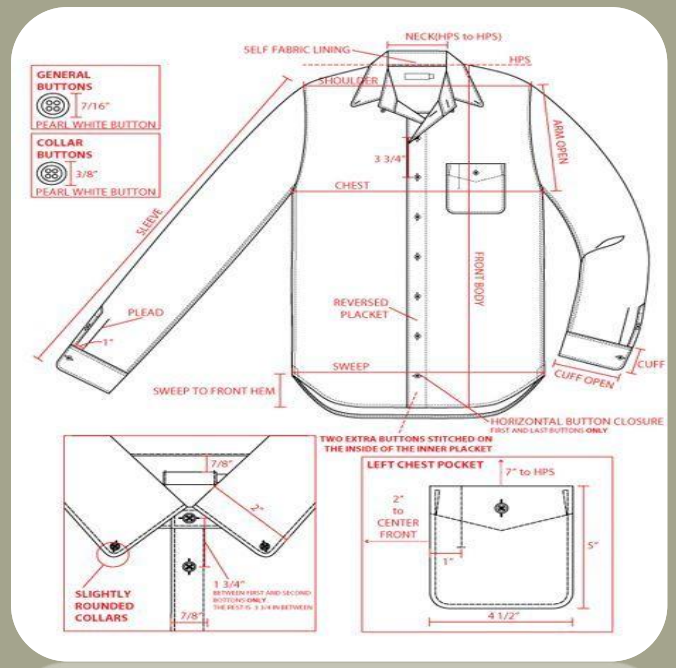
Your Designer (or you, if you're DIY'ing) will compile a collection of inspiration into a mood board that represents the aesthetic behind the design. In order to create a cohesive design, you must first organize your ideas and inspiration into a mood board. Taking the time to organize your ideas will result in a cohesive and successful final garment.

STEP 1: Collect Inspiration - Pinterest
STEP 2: Compile Ideas - Let your inspiration guide you
STEP 3: Create a Mood Board -

STEP 2: FASHION ILLUSTRATION / SKETCHES

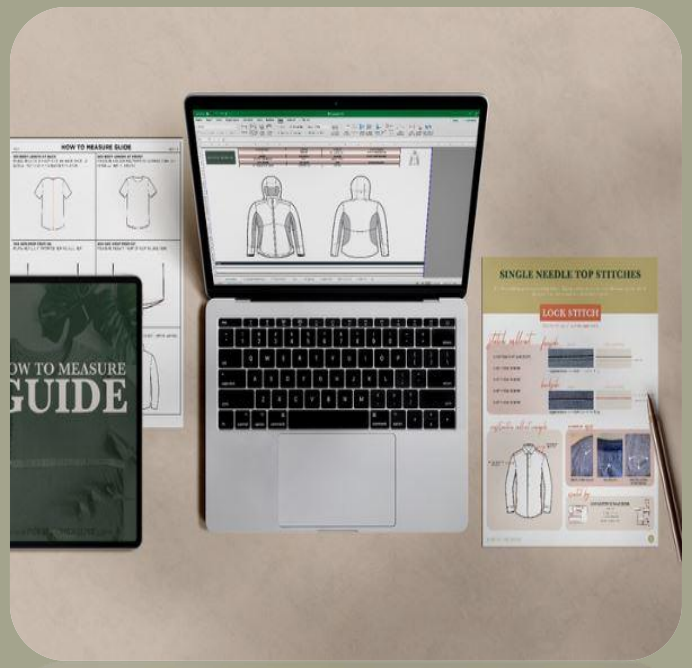
Your Designer will use a croqui to begin sketching out the ideas for your garment based on the finished mood board from step 1. If you're DIY'ing this part, don't worry about getting it perfect just yet, this step is all about getting your ideas from your head onto paper. Try some unique combinations, you never know what's going to spark those transformative design ideas! Continue this until you've created a design that you love. Now that you've narrowed down your final design, you (or your Designer) can draw this "final" design as a formal fashion illustration with color and movement. If you have a specific fabric or material in mind, be sure to attach a swatch or example of

The Sampling Process



STEP 3: TECHNICAL SKETCHES

Next, the Technical Designer (or you, if you're DIY'ing) will create a CAD of your design. CAD, Flat Sketch, Technical Sketch, Technical Flat - are all names for the flat, technically accurate drawings of your garment. Your Technical Sketch is the blueprint for your design, so it's important that the sketch reflects the correct construction of the garment.



STEP 4: TECH PACK

Your Technical Sketch will then be used to create a Tech Pack for the garment. The Technical Designer will use the silhouette and design to determine the construction details and specs. They will work with the sourcing agent or developer to come up with fabric and trim options. Once the details have been finalized, the Tech Pack is sent out for factory and fabric sourcing.

The Sampling Process

STEP 5: SOURCING

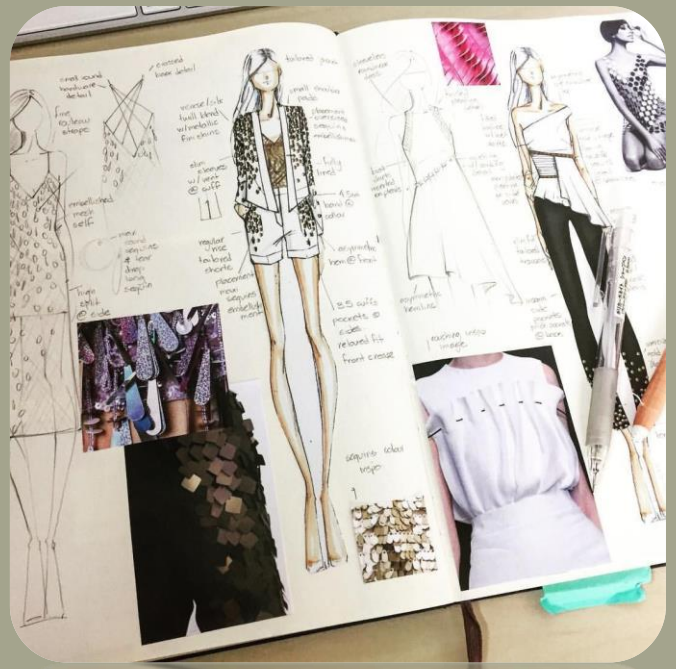
Once your style Tech Pack has been created, you can send it out to source the different elements of the design. Unless you already have a factory in mind, you can look at this like the "shopping around" phase for your design. Things that you'll want to source are:

- Manufacturing (where it's assembled)
- Trims (supplier)
- Fabrics (supplier)
- Labels and Packaging

STEP 6: SAMPLING

Now that you've sourced your factory and materials, you can update your Tech Pack to reflect it and send the Tech Pack to your factory for sampling. Your samples are made in a separate room at the factory off of the production line until your garment is ready production. Your factory will work from your Tech Pack specs to develop an initial pattern. Depending on the fabric and trims you've chosen, your factory may substitute with a close match. This is true especially if you are developing unique trims/fabrics. The factory will go ahead with substitutes for sampling to nail down the fit while your fabric/trims are being developed. This cuts down on development time and may save you some cost on sampling. Note that your samples may come in with wacky colors too! This again, is just because the factory is using what is available. Your final sample should be 100% to spec.

The Sampling Process



STEP 7: FIT AND REVIEW

When your samples come in, the Technical Designer (or you, if you're DIY'ing) will need to review the sample and adjust the Tech Pack as necessary. There's quite a few steps involved in reviewing your sample, but I've broken it all down for you in this post.

You will continue this cycle of [Tech Pack -> Sample -> Review -> Update Tech Pack -> Send] until you are happy with the final prototype. You can read more about the full sampling process in this post.

Want to learn more about fitting and creating consistent fit for your brand? I now have a full series, Fitting for Apparel Design, that breaks it all down for you! And if you need some tools to help you on the way, I've developed the Fitting DIY Kit and Foundation Patterns Kit:

STEP 8: DESIGN APPROVAL

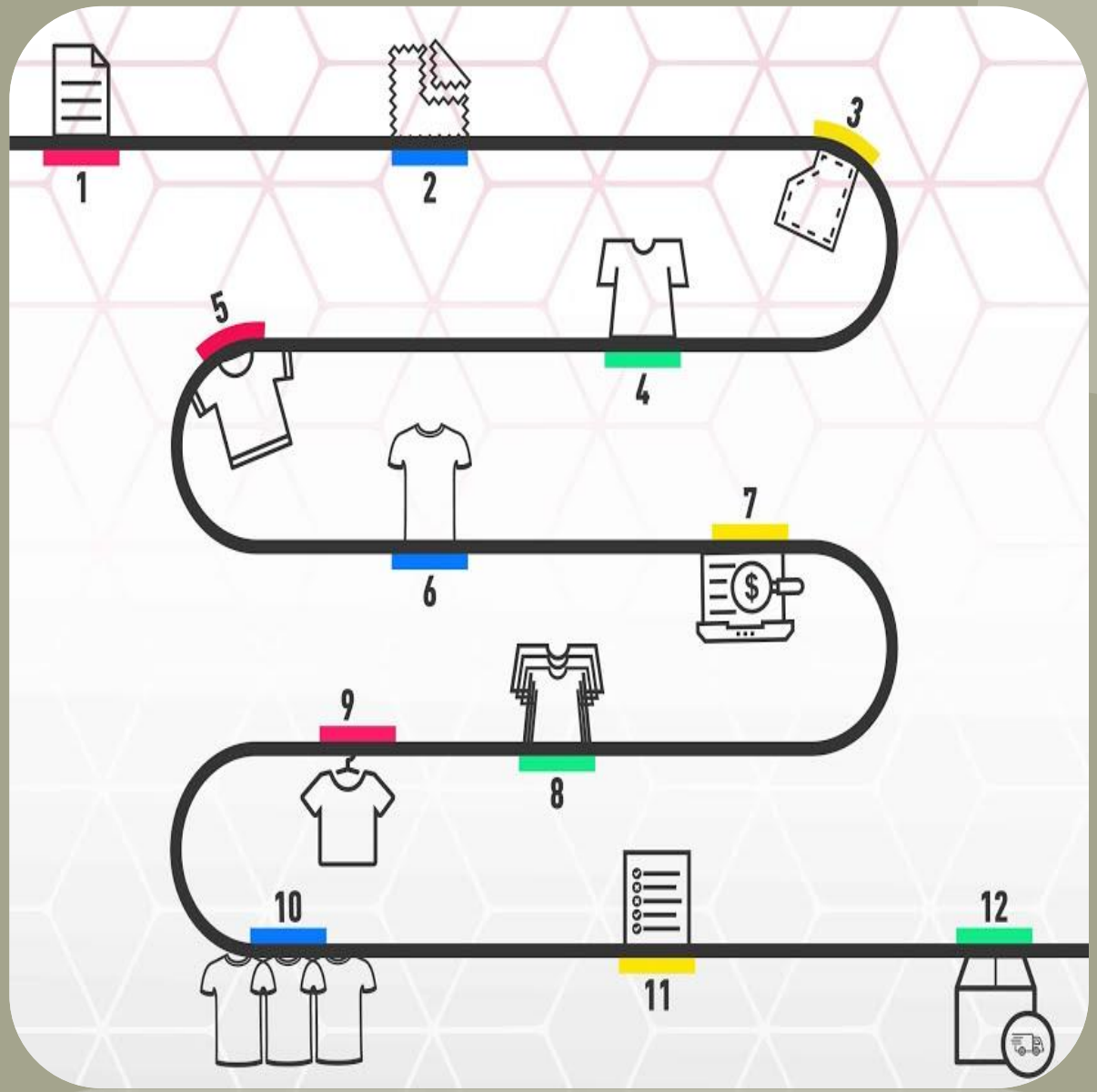
Now that you've finished up the sampling process and love your design, it's time to approve it! You'll want to double check all the details and make sure your Tech Pack is 100% accurate and updated.

Approve the design and request a TOP (Top of Production Sample) and/or PP (Pre-Production Sample). If there are no further changes you're ready for production!

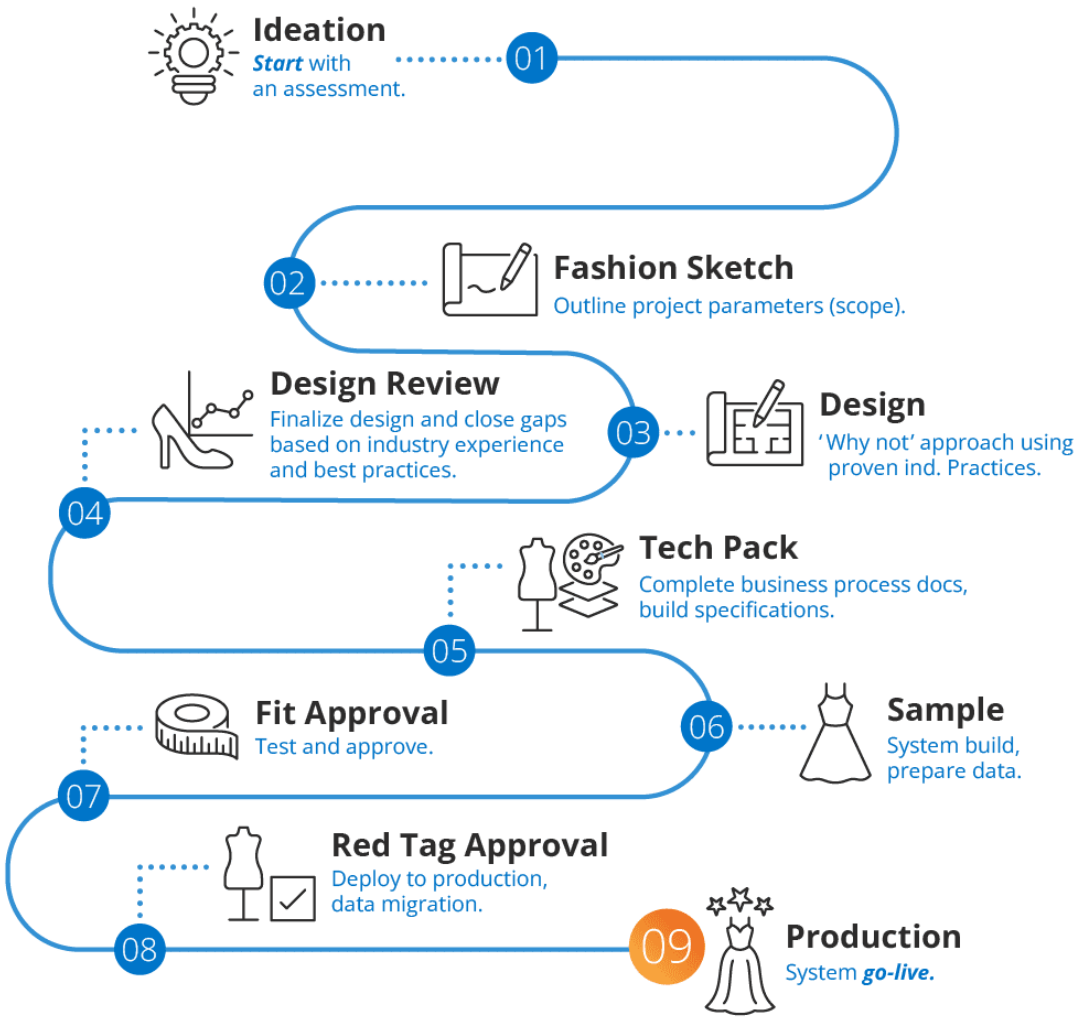
The Sampling Process

STEP 9: PRODUCTION

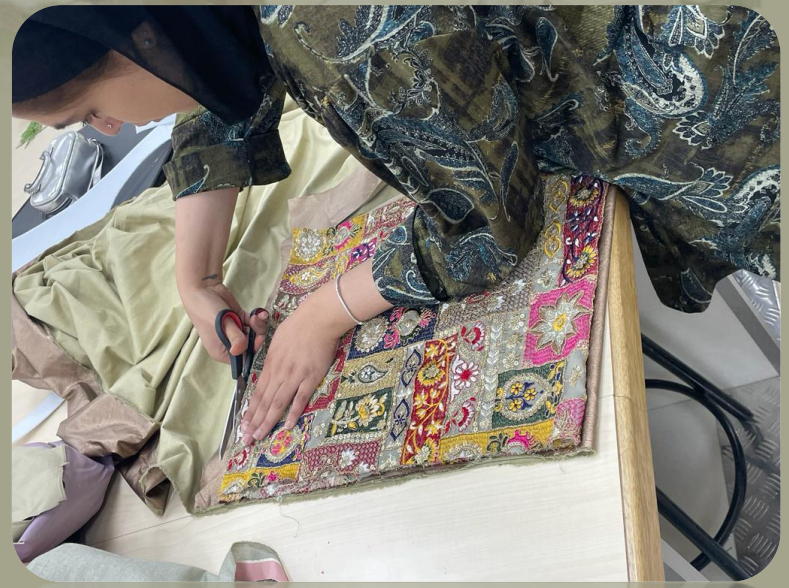
Responsibility of the Factory (Manufacturer)
Your garments will be produced on the factories production line. Once the design has been approved, you and your factory will agree on a target ship date (if you haven't already). If you've specified it in your Tech Pack, your garments will be tagged/packaged and sent to your distributor.
Once the garments have been received, inspected (QC), repackaged/tagged (if necessary) they are ready to be distributed to your retailers. Need help finding factories, suppliers, packaging or other Fashion Resources? Check out the Fashion Resource Directory



CONCLUSION


Ideation
Start with an assessment.
01
Fashion Sketch
Outline project parameters (scope).
02
Design
'Why not' approach using proven ind. Practices.
03
Design Review
Finalize design and close gaps based on industry experience and best practices.
04
Tech Pack
Complete business process docs, build specifications.
05
Sample
System build, prepare data.
06
Fit Approval
Test and approve.
07
Red Tag Approval
Deploy to production, data migration.
08
Production
System go-live.
09

THE APPLIED ARTS



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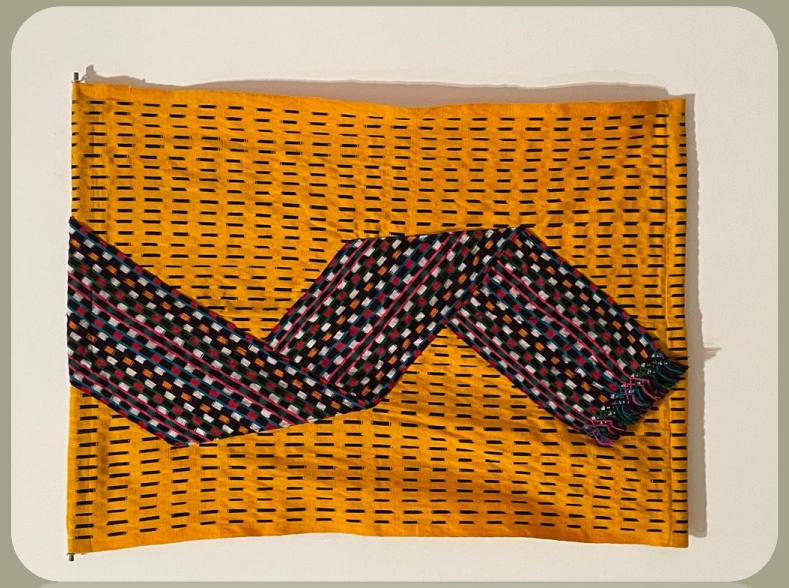

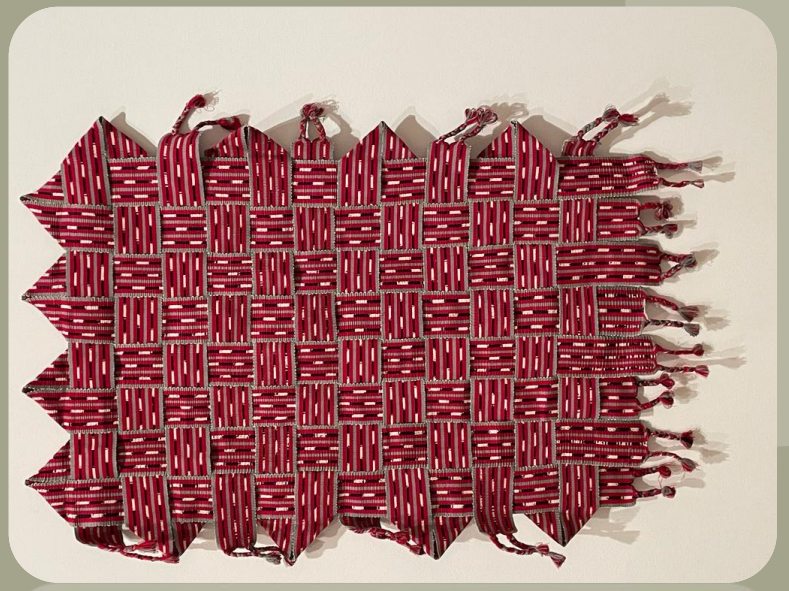

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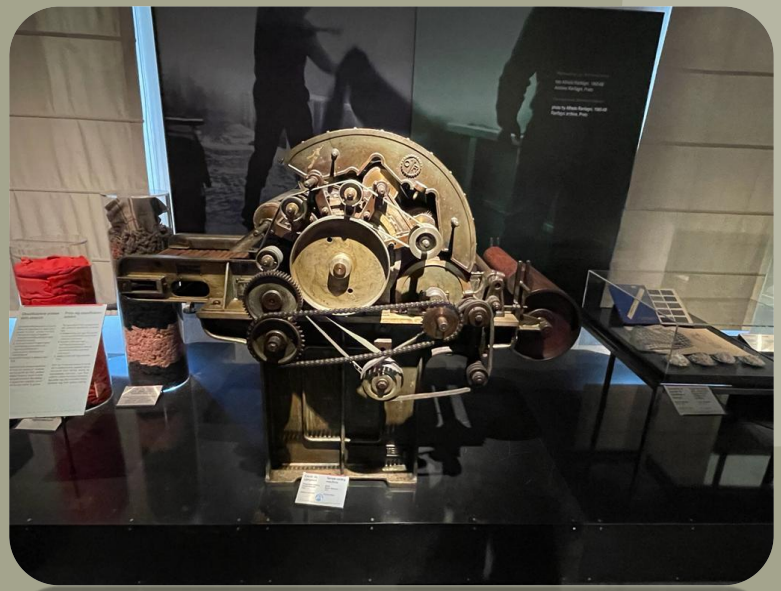

THE APPLIED ARTS

THE APPLIED ARTS

Handmade Shoes

Unlike fast fashion shoes, handmade shoes undergo a long shoemaking process before they're ready to be worn. The number of steps involved in the shoe manufacturing process depends on the style of shoes being produced. For example, how shoes are made for Private label brands is very different from the custom shoemaking process. Looking for a ballpark figure? Let's just say a shoe may be created in 70 steps — or it may take up to 300 to complete. Intrigued? Let's take a look at our custom shoemaking process.

SHOEMAKING PROCESS

A Step By Step Guide to Shoemaking

STEP 1: Measurements & Selection of Style

STEP 2 : Shoe Last Making

STEP 3: Pattern Cutting & Clicking

Step 4: Assembling the Shoe

Step 5: The Trial Shoe

Step 6: Final Craftsmanship

THE APPLIED ARTS






Making Leather Modular Armor From Pieceables

MATERIALS NEEDED

A pattern- either buy a pattern (my favorite sources are Wearable Quilts and the SCA)
Lots of Pieceables
Fingers
Time

Making Leather Modular Armor From Pieceables

Step 1: Get Supplies- Pattern and Pieceables

Step 2: Begin Snapping Pieceables Together

Step 3: Practice Bracelet

Step 4: Make the Vest

There are many different types of embroidery, each with its own unique style and techniques. Some of the most popular types of embroidery include:

1.Cross-stitch: A form of embroidery that involves stitching X-shaped stitches onto fabric to crate a design.

2.Crewelwork: A form of embroidery that uses wool yarn to create a raised, textured effect.

3.Goldwork: A type of embroidery that involves using metallic threads, beads, and other decorative elements to create intricate designs.

4-Blackwork: A type of embroidery that involves using black thread to create geometric patterns on white fabric.

5-Whitework: A type of embroidery that involves stitching white thread onto white fabric to create delicate, lacy designs.

The art of embroidery

Embroidery is a decorative art that involves stitching designs onto fabric using a needle and thread. It is a versatile art form that can be used to embellish a wide variety of textiles, including clothing, household linens, and decorative items.

The origins of embroidery can be traced back to ancient times, with evidence of embroidered textiles dating back thousands of years. Throughout history, embroidery has been used to communicate social status, tell stories, and decorate religious and ceremonial objects.

Weaving from reeds

Weaving from reeds, also known as basket weaving, is a traditional craft that involves creating baskets and other woven objects from natural plant materials. Reeds are one of the most common materials used for weaving baskets due to their flexibility, durability, and availability.

The process of weaving from reeds typically involves several steps. First, the reeds are harvested and sorted according to size and quality. The reeds are then soaked in water to make them more pliable and easier to work with.

Next, the weaver selects a pattern or design for the basket and begins to weave the reeds together. This process involves creating a base for the basket and then weaving the sides up from the base using a variety of different weaving techniques.

Once the sides of the basket are complete, the weaver can add a handle or other decorative elements to the basket if desired. The basket is then finished by trimming any excess reeds and securing the ends of the weaving.

Weaving from reeds can be done using a variety of different techniques and styles, with each culture and region having its own unique basket weaving traditions. Some of the most well-known styles of reed weaving include Native American basketry, African basketry, and traditional European basketry.

Job opportunities for young people

each student will acquire theoretical and practical skills in the three languages of Islamic art: geometry biomorphic design, and calligraphy.

Further, they will gain workshop experience in such traditional crafts as woodwork, zillij ceramics, gypsum windows, and brass-work, and how

these can be used in interior design. In addition to the practical skills, the students will gain an understanding of the principles of Islamic Art, its sacred origins, its philosophy and objectives and its status in Islamic civilization.

They will be qualified to teach many aspects of Islamic art, as well as to work within architectural, design, and publishing firms. Graduates will have attained knowledge and under- standing of the essentials of Islamic design and pro- portional systems and the metaphysical meanings that inform them. Most importantly, they will be equipped to maintain and revitalize the centuries-old tradition of Islamic art for the East as well as for the West.


ZUJ
HANDS


HANDS
HANDS Objectives:


HANDS


Università degli Studi
Guglielmo Marconi

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Al-Zaytoonah University of Jordan

Traditional Craft Heritage Training , Design and Marketing in Jordan and Syria (HANDS)

ERASMUS+Programme

HANDS Project Number : 610238-EPP-1-2019-1-JOEPPKA2-CBHE-JP