

MATERIALS AND APPLICATIONS II

IE University

Professor: **LUCAS MUÑOZ MUÑOZ**

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Academic year: 22-23

Degree course: THIRD

Semester: 1º

Category: COMPULSORY

Number of credits: 6.0

Language: English

PREREQUISITES

Students shall be willing and eager to interact with materials and machines during this semestre.

Material to work with will be sourced and acquired by the student.

Safety while working will be students responsibility, nonetheless they will be instructed on basic and specific regulations concerning the activities they will embark upon.

SUBJECT DESCRIPTION

This subject's aim is an empirical understanding of materials manipulation. For this purpose, most sessions will consist on hands on working time. The goal of these craft hours is the familiarisation of the student with different materials and techniques and the subsequent repercussion that this acknowledgement have in their design practice: **know the "know-how"**.

Unavoidably, the skill development of the student will not reach in this short period a level of craftsmanship excellence, nonetheless the fact of having had interacted with several hands-on techniques will imply an easiness to design for craftsmanship and a capacity to resolve creatively matters that relate to the act of making, and cannot, otherwise, be foreseen in the act of designing- as the more you know about the craft you are designing for the more efficient this essential relation design-craft will become.

Efficiency is the cradle of innovation and, as design is fundamentally a collaborative discipline, the designer must acquire the capacity of thinking through those lenses that the professionals, they will collaborate with, use. Furthermore, some students may also develop through this course a personal passion for the making process and incorporate this to the identity of their designs.

OBJECTIVES AND SKILLS

The aim of this semestre is twofold and requires from the student an openness to physically making, as well as a desire to know more about the hidden side of materials. Each student will individually encounter a variety of making techniques. Those they shall **explore intuitively**, following the initial guidance of the tutor and diverting into a personal exploration from there. Individual experiments will be defined in accordance with him and those experiments will find a sequence of actions of refinement. During those, the student will train a critical eye on the detail and open their design expression to new languages and vocabularies.

METHODOLOGY

During the trimestre and through the sessions, students will embark on a variety of material experiments. These experiments will have a purely empirical ethos and their goal is to understand through their hands how things are and could be made. Tools and materials will become essential during this period and it is required from the student to approach them with curiosity and respect. Basic techniques will be learnt in a general way and there on explored in a personal way. The student should develop here an understanding of the matter they are working on and the tools that are able to be used with it, in order to "make them theirs" and find unexpected results.

Teaching methodology	Weighting	Estimated time a student should dedicate to prepare for and participate in
Lectures	3.33 %	5 hours
Discussions	0.0 %	0 hours
Exercises	93.33 %	140 hours
Group work	0.0 %	0 hours
Other individual studying	3.33 %	5 hours
TOTAL	100.0 %	150 hours

PROGRAM

SESSIONS 1 - 2 (LIVE IN-PERSON)

SESSIONS 1 & 2

WEEK 1

During this session students and tutor will get to know each other and this will happen through a series of crossed presentations.

Students are required for this presentation to prepare a short presentation of maximum 10 mins, introducing themselves, their personal background, a few of their most representative projects and details about them, as well as an overview of what they think are their strengths and weaknesses as designers.

Video : [The Salt of the Earth](#) (Documentary Area)

The documentary by Wim Wenders and Juliano Ribeiro Salgado "the salt of the earth" is required to be watched before this session.

Technical note: the salt of the earth

SESSION 3 (LIVE IN-PERSON)

SESSION 3

a master class will be imparted to the students

SESSION 4 (ASYNCHRONOUS)

Session 4 (asynchronous)

WEEK 2

During these sessions students **will prepare a digital presentation** of personal researches concerning the area of materials and techniques: WOOD, STRUCTURES, GROWING AND SEEDING, WOOD FINISHES, BALANCE, RIGIDITY VS RESILIENCE VS FLEXIBILITY.

These presentations should include at least 20 examples, per student, of works by other artists or designers and other existing projects that relate to the material area of study we will develop together along the following weeks: WOOD, STRUCTURES, GROWING AND SEEDING, WOOD FINISHES, BALANCE, RIGIDITY VS RESILIENCE VS FLEXIBILITY.

It should be made clear in the images and through keywords and details what is it that the students find interesting.

These presentations will be shared online in the Forum/Discussion-Boards, and commented by all students, as well as complemented by other images that could contrast, enrich or support the original one.

This will happen in order to create a shared body of research, previous to the physical material explorations that will follow on the next weeks, and that could serve as a common inspiration/mood/research wall.

SESSION 5 (LIVE IN-PERSON)

SESSION 4

WEEK 2

During these sessions **students will prepare a digital presentation of INTENDEND PROJECT TO DEVELOP** concerning the area of materials and techniques: WOOD, STRUCTURES, GROWING AND SEEDING, WOOD FINISHES, BALANCE, RIGIDITY VS RESILIENCE VS FLEXIBILITY

Students should prepare, sketch an present 3 proposals based on the research they eveloped in the previous Asynchronous session.

These presentations should include 3 SKETCHES AND ROUGH DESIGNS, per student, of works that relate to the material ares of study we will develop along the following weeks.

SESSIONS 6 - 7 (LIVE IN-PERSON)

WEEK 3 (live in person)

During these sessions students will physically work with the area of materials and techniques: WOOD, STRUCTURES, GROWING AND SEEDING, WOOD FINISHES, BALANCE, RIGIDITY VS RESILIENCE VS FLEXIBILITY

Students will start developing the project they had efined together to the teacher the session before.

Materials should be brought by each student already for this session.

SESSIONS 8 - 9 (LIVE IN-PERSON)

WEEK 4 (live in person)

During these sessions students will physically work with the area of materials and techniques: WOOD, STRUCTURES, GROWING AND SEEDING, WOOD FINISHES, BALANCE, RIGIDITY VS RESILIENCE VS FLEXIBILITY

Each student will develop their individual project with their own material

SESSIONS 10 - 11 (LIVE IN-PERSON)

Week 5 (live in person)

During these sessions students will physically work with the area of materials and techniques: WOOD, STRUCTURES, GROWING AND SEEDING, WOOD FINISHES, BALANCE, RIGIDITY VS RESILIENCE VS FLEXIBILITY

Each student will develop their individual project with their own material

SESSION 12 (LIVE IN-PERSON)

WEEK 6 (live in person)

THIS IS A FINAL PRESENTATION DAY FOR THE THE FIRST MODULE: WOOD, STRUCTURES, GROWING AND SEEDING, WOOD FINISHES, BALANCE, RIGIDITY VS RESILIENCE VS FLEXIBILITY

It is expected an exhibition format of the class room with all projects presented together in the room. Process should be enhanced and a SHORT presentation of 3 minutes should explain this process and the results.

SESSION 13 (LIVE IN-PERSON)

SESSION 13

a master class will be imparted to the students

SESSION 14 (ASYNCHRONOUS)

WEEK 7 (asynchronous)

During these sessions students will prepare a digital presentation of personal researches concerning the area of materials and techniques: MOLDS, POURING, CASTING AND DRYING

These presentations should include at least 20 examples, per student, of works by other artists or designers and other existing projects that relate to the material area of study we will develop together along the following weeks: MOLDS, POURING, CASTING AND DRYING

It should be made clear in the images and through keywords and details what is it that the students find interesting.

These presentations will be shared online in the Forum/Discussion-Boards, and commented by all students, as well as complemented by other images that could contrast, enrich or support the original one.

This will happen in order to create a shared body of research, previous to the physical material explorations that will follow on the next weeks, and that could serve as a common inspiration/mood/research wall.

SESSION 15 (LIVE IN-PERSON)

WEEK 7

During these sessions **students will prepare a digital presentation of INTENDEND PROJECT TO DEVELOP** concerning the area of materials and techniques: MOLDS, POURING, CASTING AND DRYING

Students should **prepare, sketch and present 3 proposals** based on the research they eveloped in the previous Asynchronous session.

These presentations should include 3 SKETCHES AND ROUGH DESIGNS, per student, of works that relate to the material ares of study we will develop along the following weeks.

SESSIONS 16 - 17 (LIVE IN-PERSON)

WEEK 8 (live in person)

During these sessions students will physically work with the area of materials and techniques: MOLDS, POURING, CASTING AND DRYING

Students will start developing the project they had efined together to the teacher the session before.

Materials should be brought by each student already for this session.

SESSIONS 18 - 19 (LIVE IN-PERSON)

WEEK 8 (live in person)

During these sessions students will physically work with the area of materials and techniques: MOLDS, POURING, CASTING AND DRYING

Each student will develop their individual project with their own material

SESSIONS 20 - 21 (LIVE IN-PERSON)

WEEK 9 (live in person)

During these sessions students will physically work with the area of materials and techniques: MOLDS, POURING, CASTING AND DRYING

Each student will develop their individual project with their own material

SESSION 22 (LIVE IN-PERSON)

WEEK 10 (live in person)

THIS IS A FINAL PRESENTATION DAY FOR THE THE SECOND MODULE: MOLDS, POURING, CASTING AND DRYING

It is expected an exhibition format of the class room with all projects presented together in the room. Process should be enhanced and a SHORT presentation of 3 minutes should explain this process and the results.

SESSION 23 (ASYNCHRONOUS)

WEEK 10 (asynchronous)

During these sessions students will prepare a digital presentation of personal researches concerning the area of projects related to the ones they have developed and designed on the two previous modules.

These PDF presentations should include at least 20 examples, per student, of works by other artists or designers and other existing projects that relate to the two projects they have developed, 10 per project.

It should be made clear in the images and through keywords and details on top of the images what is it that the students find interesting.

SESSION 24 (LIVE IN-PERSON)

WEEK 10

This is a recap session, each student is expected to prepare a presentation of their previous Module 1 and module 2 experiment results and contrast those with the research developed in the previous Asynchronous session.

IMPROVEMENTS and CORRECTIONS must be proposed by the students during this session. These will be discussed and selected together to the tutor and developed during the following sessions.

SESSIONS 25 - 26 (LIVE IN-PERSON)

WEEK 11 (live in person)

During these sessions students will physically work on improvements to their previous projects and/or a new project that sums up to the trimestre work.

Each student will develop their individual project with their own material

SESSIONS 27 - 28 (LIVE IN-PERSON)

WEEK 12 (live in person)

During these sessions students will physically work with the area of materials and techniques: MOLDS, POURING, CASTING AND DRYING

Each student will develop their individual project with their own material

SESSIONS 29 - 30 (LIVE IN-PERSON)

THIS IS A FINAL PRESENTATION DAY FOR THE THE FULL TRIMESTRE

It is expected an exhibition format of the class room with all projects presented together in the room.

Process should be enhanced and a SHORT presentation of 3 minutes should explain this process and the results.

BIBLIOGRAPHY

Compulsory

- Richard Sennet. *the craftsman*. penguin. ISBN 9780141022093 (Printed)

- Ziya Tong. *the reality bubble*. Canongate Books Ltd. ISBN 9781838850487
(Printed)

Recommended

- Tim Ingold. *Making*. ROUTLEDGE. ISBN 0415567238 (Printed)

- Richard Sennet. *together*. ISBN 0141022108 (Printed)

- Richard Sennet. *building and dwelling*. ISBN 0141022116 (Printed)

EVALUATION CRITERIA

CLASS PARTICIPATION 50%

Each weekly individual experiments will conform the body of learning of the student. Dynamic and enthusiastic commitment here is essential as well as the capacity and vision of the student to innovate and resolve their experiments.

INTERMEDIATE TESTS 30%

It is included within this criteria the Forum participation - held during the sessions that follow each group presentation - and the capacity to address relevant matters within other students. Constructive and positive feedback is expected, as well as critical and to the point comments.

Module final presentations are to be computed here as well.

FINAL EXAM 20%

The Final exam will consist on a collective exhibition that will include all elements designed and created by the students individually. This exhibition will be arranged and managed by groups and this final exhibition group work will also be evaluated as group presentation.

Criteria	Percentage	Comments
Class Participation	30 %	
Intermediate Tests	30 %	
Final Exam	20 %	
Individual Work	20 %	

PROFESSOR BIO

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Lucas Muñoz is a designer based between his hometown Madrid (Spain) and Eindhoven (The Netherlands). His career ranges through an ample variety of projects produced from one of his ateliers in those countries, or locally in different places in the world, having developed contextualized work in territories such as India, South Korea, Lebanon or Thailand within others, in addition to many European ones. Adds up to this his extensive development of furniture unique and limited pieces, together with many other experimental ones such as sound systems, boats or skateboards. Lucas has materialized exhibition and interior design projects with which he always managed to develop an extended understanding of his profession. Examples of this, within the last year, are his restaurant project MO de Movimiento in Madrid (for which he received the FRAME Award for Best Use of Material and the Dezeen Award for Most Sustainable Interior) , or the sociological study The Rocket Trail (for which he got the Talent development grant by the Dutch cultural funds, Stimuleerfonds) that he translated into an exhibition, an archive and a docufilm conceptualized, co-directed and produced by him.

OTHER INFORMATION

website: lucasmunoz.com

instagram: @lucasmunozm

skype: lucas.munoz.m

gallery in Madrid: Machado Muñoz

designed space that could be visited in Madrid: Mo de Movimiento

