MATERIALS AND APPLICATIONS II

GRADO EN DISEÑO
Professor: BREZO ALCOCEBA LÓPEZ-ARAQUISTAIN
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Academic year: 19-20
Degree course: THIRD
Semester: 1º
Category: COMPULSORY
Number of credits: 6.0
Language: English

PREREQUISITES
The students are required to know the basic supports and materialities that allow the design realization (e.g. Wood and Composites, Ceramics and Glass, Metals and Plastics).

In addition, it is necessary to be familiar with design research methods, ideation techniques, visualisation and prototyping in physical and digital format. The practical requirements are: hand sketching and computer skills in order to research and compile presentations (e.g. Powerpoint, Indesign, Illustrator). Students must have a very good predisposition to manual work, using different types of materials, and dominate the use of tools and machineries in the Fablab.
SUBJECT DESCRIPTION
This class focuses on the expansion of the contents already acquired in Materials and Applications I, as well as its application in Spatial Design projects.

Its content starts from the analysis of the spatial strategies used by Nature (Solid Space / Modular Space / Mesh Space / Web Space) to understand how human beings reinterpret them materially and constructively in their own Spatial Designs on four fundamental scales: City (environmental space unit) / Building (exterior space unit) / Room (interior space unit) / Fashion (individual space unit).
OBJECTIVES AND SKILLS
The main themes and skills to be acquired will be:
- To expand the catalog of already known materials.
- To learn the different production systems according to the selected raw material.
- To learn how to use the materials and its formats in Spatial Design.
- To identify the use of the most adequate material and construction system depending on a project briefing.
- To link the materials and its applications with biomimetics and bioinspiration.
- To link artisan and digital processes of production.
- To differentiate between structural and finishing elements.
- To analyze essential historical and contemporary references in Spatial Design.
- To apply the Material Theory to practical exercises.
METHODOLOGY
This theoretical-practical class is divided into five blocks of interrelated content: an introduction and four specific sections about constructive strategies for the Spatial Design.

0. INTRODUCTION
1. Solid Space
2. Modular Space
3. Mesh Space
4. Web Space

In each block:

1. The theory is acquired by a lecture + a reading/visualization.

Lectures (L=Lecture):
L0 = Space design through Nature: materials and applications
L1 = Solid Space
L2 = Modular Space
L3 = Mesh Space
L4 = Web Space

Reading/visualization (IA=Individual Assignment):
IA0 = Documentary: Animal building skills. (https://www.youtube.com/watch?v=9BVW6eoe9bl)
IA3 = Film: Pollack, Sydney. Sketches of Frank Ghery. USA-Alemania. 2005
IA4 = Ted: Talks for the fiber arts lover: (https://www.ted.com/playlists/499/talks_for_the_fiber_arts_lover)

2. The practice is acquired by research projects, where the student empirically develops what they have learned theoretically. In them, both individual and teamwork are promoted, as well as critical thinking and debate.

Research projects (GP=Group Project/ IP=Individual Project):
GP0 = Future Nomad Shelter (teams of 3 people). Long research project. (Partial submissions= S10/S16/S22 + Pre-Final-submission= S28 + Final- submission /Jury= S29+S30)
IP1 = S-City (individuall). Short research project (Submission S9)
IP2 = Mo-Building (individuall). Short research project (Submission S15)
IP3 = Me-Room (individuall). Short research project (Submission S21)
IP4 = W-Fashion (individuall). Short research project (Submission S27)

3. There is a multichoice test to value the acquired knowledge.

Multichoice tests (IT=Individual Test):
IT0 = L0+IA0 (S9)
IT1 = L1+IA1 (S9)
IT2 = L2 + IA2 (S15)
IT3 = L3 + IA3 (S21)
IT4 = L4 + IA4 (S27)

In addition, the professor will teach students how to communicate their projects through diagrams instead of texts. The diagram, as a personal figure to explain concepts and ideas, will thus be the most relevant tool used throughout the course. It will be used both by the professor in the sharing of contents, and by the students in the explanation of their proposals. In each project, the use of diagrams is favored over text as a means to explain, analyze and describe concepts, processes, details, forms, uses... The use of text must be synthetic, allowing the project to be read through the coherence of images, diagrams and keywords.

Laptops are welcomed only for class use.

Notebooks are recommended for sketching purposes.
<table>
<thead>
<tr>
<th>Teaching methodology</th>
<th>Weighting</th>
<th>Estimated time a student should dedicate to prepare for and participate in</th>
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</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>10.0 %</td>
<td>15 hours</td>
</tr>
<tr>
<td>Discussions</td>
<td>10.0 %</td>
<td>15 hours</td>
</tr>
<tr>
<td>Exercises</td>
<td>30.0 %</td>
<td>45 hours</td>
</tr>
<tr>
<td>Group work</td>
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<tr>
<td>Other individual studying</td>
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<td>30 hours</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0 %</td>
<td>150 hours</td>
</tr>
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</table>
INTRODUCTION

SESSIONS 1 - 2 (FACE TO FACE)

Professor presentation: BZ / Subject presentation.

The teacher will present herself and her work. Afterwards, we will introduce the structure of the course.

Spatial design through Nature: materials and applications (Lecture)

We will analyze the methods used by Nature to design / redesign the space, as well as the materials used during the process. These will be contrasted with those used by animals and the artificial reinterpretation generated by human beings, both on a large and a small scale. As a conclusion of the research, we will establish four spatial strategies that are related to each other in a circular way. These four theoretical blocks will be used as a script for the content of the subject: Solid Space (e.g., Hornero bird) / Modular Space (e.g., Caddisfly) / Mesh Space (e.g., Radiolaria) / Web Space (e.g., Spider).

Future Nomad Shelter (3-Group Project. Statement)

A futuristic and innovative DIY kit for a Future Nomad Shelter will be projected and built. It must be Life-size and based on the analysis and reinterpretation of constructive and material strategies developed in Nature (whether animal, vegetal or inorganic). After a previous research process, its design must start from the invention of an original "material" and "constructive system". Three partial submissions, one final-pre submission and one final submission are established. All of them must be submitted in physical and digital (a commercial website) format. Both the structure of the website and its interface must transmit its design spirit.

Contents:

GP0.1 Partial submission (S10) SECONDARY RESEARCH:

- Materials Research [3 Physical samples + 3 Record cards (company, reference number, composition, field of application, etc)]
- Constructive system: How it works, required machinery and innovation provided.[3 Photographs+3 Diagrams+3 Keywords]
- Analysis of a morphological strategy developed in Nature. [3 Photographs+3 Diagrams+3 Keywords]
- Analysis of a material used in Nature. [3 Photographs+3 Diagrams+3 Keywords]
- Analysis of a developed human nomad shelter inspired by natural strategies / materials.[3 Photographs+3 Diagrams+3 Keywords]
- Analysis of a DIY kit of interest for this project [3 Photographs+3 Diagrams+3 Keywords].
GP0.2 Partial submission (S16) PRIMARY RESEARCH:

MOODBOARD
- Panel of inspiration with images, drawings, key words and textures, to help you face the project (from the material and constructive points of view mainly). [1 face]

MATERIAL EXPERIMENTATION
- Taking the moodboard as a starting point, students will bring an "invented" material and its respective joint. [1 sample material +1 sample joint / Life-scale 1/1]
- A Record card [name assigned to the material, composition, characteristics, phases of the process, relation of the resulting material/ union with the natural strategies]

GP0.3 Partial submission (S22) PRIMARY RESEARCH:

PROTOTYPE MODEL
- Volume shelter model [1/5 scale].

CHARACTERISTICS
- Analysis to understand the project [Diagrams and Keywords: 3 in relation with its own morphology + 3 in relation to the human body + 3 in relation with the exterior]

BRAND
- Name of the company and the brand designed for on-line commercialization, as well as the name and surname of the members of the research team.

FUNCTION
- Name of the project. [1 Word or Phrase]
- How it works and reasons to use your Nomad Shelter in the future [Max. 100 words].

GP0.4 Final pre- submission (S28) PRIMARY RESEARCH + PRESENTATION:

FINAL PROTOTYPE
- Prototype in Life-size 1/1

PACKAGING
- Packaging of the kit DIY in Life-size 1/1

WEBSITE
- Website to sell the project. Texts, diagrams and professional photographs. DIY kit instructions and pricing.

GP0.5 Final- submission (S29 + 30) PRESENTATION:

FINAL JURY
- Final project defense.

WEBSITE
- The final website will be uploaded in Campus before 23:59. Pdf also required.

e.g. Ode by Alba Arillo

REBUILD

SESSIONS 3 - 4

REBUILD (Visit)
We will visit the REBUILD fair, linked to the Advanced Architecture and Construction 4.0 Congress.
Date: September 19th
Place: IFEMA
Address: Av. Partenón, Nº 5, 28042 Madrid
*The information will be updated when the appointment is made.
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REBUILD (Request information and samples)

8
14th June 2019
The visit will help the students look for constructive and material processes in order to face the GP0.1 Future Nomad Shelter project:

**GP0.1 Partial submission (S10) SECONDARY RESEARCH:**
- **REBUILD**
  - Materials Research [3 Physical samples + 3 Record cards (company, reference number, composition, field of application, etc)]
  - Constructive system: How it works, required machinery and innovation provided.[3 Photographs+3 Diagrams+3 Keywords]

* M.D.: IA0. Documentary: Animal building skills.

**SOLID SPACE**

**SESSIONS 5 - 6 (FACE TO FACE)**

**Solid Space (Lecture)**

Solid Space, characterized by the use of moldable and modelable materials, implies the development of more continuous and customizable surfaces from the manipulation of the material itself. The content of this didactic block starts from the continuity and its transition towards constructive discontinuity through the prefabrication of smaller and standardized pieces. This block will describe the design possibilities offered by the behavior of the MATERIAL [Basic / Specific/ Innovative], as well as the types and possibilities of the MANIPULATIONS that are required for this [Molding/ Modeling/ Finishing / Color / Degradation]

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**S-City (Individual Project. Statement)**

Statement:
Through experimentation, the students will design an urban element by modeling in extruded polystyrene:
Choose a city from the book *Invisible Cities* by Italo Calvino that inspires you with a sense of Solid Space and design a piece of urban furniture for it: a seating solution.

**SECONDARY RESEARCH**
- Justification of the selected city [75-100 words]
- Brief research on seating solutions [material, construction system, ergonomics, etc.). [3 Photographs + 3 Diagrams + 3 Keywords]

**PRIMARY RESEARCH**
- Model of the proposal [scale 1/5. Adaptable]
- What material would be used on a real scale [1 Word or phrase]
- What technique would be used on a real scale [1 Word or phrase]
- Analysis [Diagrams: 3 in relation to the morphology + 3 in relation to the human body + 3 in relation to usage]
- Manufacturing process [3 Photographs + 3 Keywords].
- Result [3 Photographs]

**PRESENTATION**
- Pdf Dossier (Campus S10 before 23:59)
- Model in physical format (In class S10).


**SESSIONS 7 - 8 (FACE TO FACE)**

**Solid Space (Lecture)** Continuation of the Lecture initiated in session S5.

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SESSIONS 9 - 10 (FACE TO FACE)

Solid Space + INTRODUCTION (Individual Multichoice Test)
Two tests* (IT0 and IT1) will be done in order to value the knowledge acquired in blocks 0 and 1.
* Consult the METHOLOGY section.

S-City (Individual Project Submission)
* Consult the statement (S6)

Future Nomad Shelter (3-Group Project. Partial Submission)
GP0.1 SECONDARY RESEARCH:
   REBUILD
   - Materials Research [3 Physical samples + 3 Record cards (company, reference number, composition, field of application, etc)]
   - Constructive system: How it works, required machinery and innovation provided.[3 Photographs+3 Diagrams+3 Keywords]
   NATURE
   -Analysis of a morphological strategy developed in Nature. [3 Photographs+3 Diagrams+3 Keywords]
   -Analysis of a material used in Nature. [3 Photographs+3 Diagrams+3 Keywords]
   SHELTER
   -Analysis of a developed human nomad shelter inspired by natural strategies / materials.[3 Photographs+3 Diagrams+3 Keywords]
   DIY
   -Analysis of a DIY kit of interest for this project [3 Photographs+3 Diagrams+3 Keywords].

MODULAR SPACE

SESSIONS 11 - 12 (FACE TO FACE)

Modular Space (Lecture)

Modular Space is characterized by the use of standardized pieces (superficial character), the union of which results in a superficial discontinuity, both constructive and perceptive. It is made of independent modules. Therefore, the suppression of certain pieces, as well as certain reconfigurations, promote the transition from the massive to the ethereal space, even to the point of inversion of its spatial reading.

The spaces configured by modules are characterized by their modules and their connection, so this block will describe the design possibilities offered by the MODULE concept [Shape / Scale / Proportion / Distance / Organization / Discontinuity], as well as the JOINTS required [Nothing / Assembly / Masonry / Substructure / Alternative].

Mo-Building (Individual Project. Statement)
Statement:
An architectural intervention is designed through experimentation by modulation with Lego pieces: To innovate the facade of the traditional tobacco dryer houses from Vega de Granada, as a 21st century artisan would do. A transition of the modulation towards the lattice must be appreciated.

SECONDARY RESEARCH
-Brief research on tobacco dryer houses [3 Photographs + 3 Keywords]
-Brief research on brick facades [3 Diagrams + 3 Keywords]

PRIMARY RESEARCH
- Model of the proposal [scale 1/15. Adaptable].
- Analysis of the proposal [Diagram: 1 Elevation + 3 Vertical sections]
- Process (3 Photographs + 3 Keywords).
- Result (3 Professional photographs)

PRESENTATION
- Pdf Dossier (Campus S16 before 23:59)
- Models in physical format (In class S16)


SESSIONS 13 - 14 (FACE TO FACE)

Modular Space (Lecture) Continuation of the Lecture initiated in session S11.

Mo-Building (Individual Project)
Corrections / Experimentation

SESSIONS 15 - 16 (FACE TO FACE)

Modular Space (Individual Multichoice Test)
The test* (IT2) will be done in order to value the knowledge acquired in block 2.
* Consult the METHODOLOGY section.

Mo-Building (Individual Project Submission)
* Consult the statement (S12)

Future Nomad Shelter (3-Group Project. Partial Submission)

GP0.2 PRIMARY RESEARCH:
Moodboard
- Panel of inspiration with images, drawings, key words and textures, to help you face the project (from the material and constructive points of view mainly). [1 face]

Material Experimentation
- Taking the moodboard as a starting point, students will bring an "invented" material and its respective joint. [1 sample material+1 sample joint / Life-scale 1/1]
- A Record card [name assigned to the material, composition, characteristics, phases of the process, relation of the resulting material/ union with the natural strategies]

Mesh Space

SESSIONS 17 - 18 (FACE TO FACE)

Mesh Space (Lecture)
Mesh Space is characterized by the use of the emptiness as a surface generator; its use implies the development of reticular surfaces. Due to its linear nature, the interweaving of elements of thinner and thinner section promotes a transition towards superficial flexibility.
This block describes the design possibilities offered by the different types of MESH STRUCTURE [Ruled Surface / Triangled Structure / Ribs / Tensegrity], as well as the ELEMENTS that are required for this [Bar / Articulation / Covering].

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Me-Room (Individual Project. Statement)

Through experimentation with rubber bands and sticks, students will intervene an interior space: Tensegrity sculpture to place inside the Guggenheim Bilbao Museum (Frank Gehry)

SECONDARY RESEARCH
- Brief research on tensegrity [3 Diagrams + 3 Keywords]
- Brief research on the Guggenheim Bilbao Museum [3 Photographs + 3 Keywords]

PRIMARY RESEARCH
- Model of the proposal [Scale 1/5. Adaptable]
- Analysis [Diagrams: 3 in relation to the body + 3 in relation to the space]
- Process [3 Photographs + 3 Keywords]
- Result [3 Photographs + Photomontage]

PRESENTATION
- Pdf Dossier (Campus S21 before 23:59)
- Models in physical format (In class S21).


SESSIONS 19 - 20 (FACE TO FACE)

Mesh Space (Lecture)

Continuation of the Lecture initiated in session 17.

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Me-Room (Individual Project)

Corrections / Experimentation

SESSIONS 21 - 22 (FACE TO FACE)

Mesh Space (Individual Multichoice Test)

The test* (IT3) will be done in order to value the knowledge acquired in block 3.
* Consult the METHODOLOGY section.

Me-Room (Individual Project Submission)

* Consult the statement (S18)

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Future Nomad Shelter (3-Group Project. Partial submission)

GP0.3 PRIMARY RESEARCH:

PROTOTYPE MODEL
- Volume shelter model [1/5 scale. Adaptable].

CHARACTERISTICS
- Analysis to understand the project [Diagrams and Keywords: 3 in relation with its own morphology + 3 in relation to the human body + 3 in relation with the exterior]

BRAND
- Name of the company and the brand designed for on-line commercialization, as well as the name and surname of the members of the research team.

FUNCTION
- Name of the project [1 Word or Phrase]
- How it works and reasons to use your Nomad Shelter in the future [Max. 100 words].

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WEB SPACE

SESSIONS 23 - 24 (FACE TO FACE)

Web Space (Lecture)

Web Space is characterized by the use of filaments joined by a great diversity of ligaments, which implies the development of flexible surfaces. The use of other resources of a fluid nature, promotes its transition towards rigidity (solidity), thus closing the circle of spatial strategies that encompasses the content of this course. This block describes the design possibilities offered by the MATERIALS [Classification / Properties / Microscopy] to generate the FABRICS [Leather / Fluid / Fiber / Thread / Composites].

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W-Fashion (Individual Project. Statement)

An abstract body wrapping is designed through experimentation with threads:
Three-dimensional headdress made with a fabric canvas combining two types of structures.

SECONDARY RESEARCH
-Brief research on Anni Albers (Bauhaus) [3 Photographs + 3 Keywords]

PRIMARY RESEARCH
- Model [Life-size 1/1]
- Analysis [Diagram: 1 colored canvas of the structures]
- Process [3 Photographs + 3 Keywords]
- Result on the head [3 Photographs]

PRESENTATION
- Pdf Dossier (Campus S28 before 23:59)
- Models in physical format (In class S28).

Video: Ted: Talks for the fiber arts lover

SESSIONS 25 - 26 (FACE TO FACE)

Web Space (Lecture)

Continuation of the Lecture initiated in session 23.

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W-Fashion (Individual Project)

Corrections / Experimentation

SESSIONS 27 - 28 (FACE TO FACE)

Web Space (Individual Multichoice Test)

The test* (IT4) will be done in order to value the knowledge acquired in block 4.
* Consult the METHOLOGY section.

W-Fashion (Individual Project Submission)

* Consult the statement (S24)

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**Future Nomad Shelter (3-Group Project. Final pre-submission)**

**GP0.4 PRIMARY RESEARCH + PRESENTATION:**
- Final Prototype
  - Prototype in Life-size 1/1
  - Packaging
- Packaging of the kit DIY in Life-size 1/1
  - Website
- Website to sell the project. Texts, diagrams and professional photographs. DIY kit instructions and pricing.

**SESSIONS 29 - 30 (FACE TO FACE)**

**Future Nomad Shelter (3-Group Project. Final submission)**

**GP0.5 PRESENTATION:**
- Final Jury & Exhibit
- Final project defense.
  - Website
- The final website will be uploaded in Campus before 23:59. Pdf also required.

**Future Nomad Shelter (3-Group Project. Final submission)**

**GP0.5 PRESENTATION:**
- Final Jury & Exhibit
- Final project defense.
  - Website
- The final website will be uploaded in Campus before 23:59. Pdf also required.
BIBLIOGRAPHY

COMPULSORY:

Bibliography:


Filmography:

-Animal building skills. https://www.youtube.com/watch?v=9BVW6eoE9bI


-Ted:

-Talks for the fiber arts lover. (https://www.ted.com/playlists/499/talks_for_the_fiber_arts_lover)


RECOMMENDED:

Online Magazines:

-Dezeen https://www.dezeen.com/

-Archdaily https://www.archdaily.com/

-Metalocus https://www.metalocus.es/en

-Archilovers https://www.archilovers.com/

-Innovative Materials https://issuu.com/innovatievematerialen

Instagram:
Zap_buj
3Dprinting+Construction
Material ConneXion Bilbao
Reshape
Bartlett B-Pro
Dinámico LAB
Andreas Körner
Design by Bonnie Hvillum
AA EmTech
ABK INKUBATOR
Studiomtx
Material Design Lab
Daniel Widrig
NODES/
Boa Mistura
ICD University of Stuttgart
TextielMuseum / TextielLab
IAAC Barcelona
Parsons MFA
Iris van Herpen Official
Materialarchitecturelab
EVALUATION CRITERIA

The evaluation system will be the sum of the intermediate tests, practices and participation.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percentage</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Long research project (GP0)</td>
<td>25 %</td>
<td>Research &amp; Practice</td>
</tr>
<tr>
<td>Short research projects (IP1+IP2+IP3+IP4)</td>
<td>40 %</td>
<td>Research &amp; Practice</td>
</tr>
<tr>
<td>Individual Multichoice Tests</td>
<td>25 %</td>
<td>Lectures &amp; Readings + Visualizations</td>
</tr>
<tr>
<td>Class Participation</td>
<td>10 %</td>
<td>Lectures &amp; Practice</td>
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LONG RESEARCH PROJECT

This long project is structured in: Secondary research, Primary research and Presentation.

It has 3 partial submissions (GP0.1 (S10) / GP0.2 (S16) / GP0.3 (S22)), a final-pre submission (GP0.4 Pre-final submission (S28)) and a Final submission (GP0.5 Final submission (S29 + 30)). The evaluation will be continuous, so each part will be corrected independently in the class (no formal marks will be received, but the degree of adaptation to the project’s requirements will be known in order to be able to improve it for the Final submission). The global mark will be obtained at the end of the course, according to the following criteria:

1. Secondary research will value the capacity to extract references and to analyze them. Its objective is to set the bases for adequate primary research based on own experimentation. (20% of the note).

   - Very poor (1)
   - Incomplete, incompressible analysis of references or without interest.
   - Poor (2.5)
   - Inconsistent or poor quality analysis of references. It does not allow to understand the contributions to the project.
   - Average (5)
   - Adequate and coherent selection of references, but without too much interest or quality.
   - Good (7.5)
   - Interesting speech through references and very well analyzed.
   - Very good (10)
   - An excellent research base to be a starting point for primary research.

2. In relation to primary research, the complexity is specially valued in the creation of the material and the constructive system. It is important to transmit the originality and the innovation of the project. In relation to the process, it is important to justify the decisions in a simple and ordered way. In relation to the results, the quality of execution and adequacy to the objective of the course is valued. (60% of the note)

   - Very poor (1)
   - The project decisions are not explained. Diagrams do not transmit ideas. The project is not original nor does it propose anything innovative. The process lacks interest, its quality of execution is not good and does not conform to the objectives of the course.
   - Poor (2.5)
   - The project decisions are vaguely explained. The diagrams partially transmit the ideas of the project. The project is not too original nor does it propose something really innovative. The process is interesting, but its quality of execution is not good and does not fit the objectives of the course or the other way around.

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Average (5)
The design decisions could be explained in a better way. The diagrams transmit the ideas of the project, but could be more complete. The project could be more original to plan something really innovative. The process is interesting, the quality of execution is sufficient and fits the objectives of the course in a basic way.

Good (7.5)
The design decisions are well explained with respect to the material, the processes and its volumetry. The diagrams are varied and transmit the ideas of the project well. The project is original and gets something innovative. The process is interesting, the quality of the execution is good and it fits well with the objectives of the course.

Very good (10)
The design decisions are explained with respect to the material, the procedures and their volume in an excellent and varied way. The diagrams are varied and transmit the ideas of the project in an excellent way. The project is very original and gets something very innovative. The process is very interesting, the quality of execution is excellent and adapts very well to the objectives of the course.

3 In relation to the presentation, the quality of the physical, graphic and visual execution is important. Also the ability to synthesize, the ability to transmit ideas and the use of a professional layout / exhibition that enhances the content. (20% of the note)

Very poor (1)
Graphic quality, structure of contents and layout are very careless. It does not help understand the project.

Poor (2.5)
Although the graphic quality, structure of contents and layout could be improved, it helps understand the project in a very basic way.

Average (5)
Presentation of basic quality that helps understand the project.

Good (7.5)
Presentation of good quality that helps understand the project well.

Very good (10)
Professional project that works excellently in every aspect.

SHORT RESEARCH PROJECT
Each short project is structured in: Secondary research, Primary research and Presentation.
The evaluation criteria will be the same as for the Long Research Project.

INDIVIDUAL MULTICHOICE TEST
A multichoice test It will be done per block.
Each one has 15 questions and will be answered in 10 minutes.

CLASS PARTICIPATION
Student participation is taken for granted, so this grade will increase its value if the student's attitude promotes a proactive and positive dynamic during lectures, the corrections and group work. Speaking is not the same as participate. It implies a content contribution, a clear position and an adequate argumentation.

PROFESSOR BIO
Professor: BREZO ALCOCEBA LÓPEZ-ARAQUISTAIN
E-mail: balcoceba@faculty.ie.edu

PhD Architect and Designer.
Expert in the design of the space between the body and the building, Brezo Alcoceba became a doctor in 2015 with the thesis Artificial skin. Architectural metamorphosis of the body through the surface. This research has been selected to represent Spain at the Venice Biennale of Architecture 2018: Becoming.

She has been coordinator and professor of Fashion Design in ESNE (Design, Innovation and Technology School), Fashion-Tech in AMD (Architecture, Fashion and Design) and Textile Technology in IED (Istituto Europeo di Design). She also has delivered lectures and workshops in different institutions such as MediaLab Prado or Dimad.

As a designer, she works under the brand BZArquicostura. She has participated in catwalks and in exhibition spaces such as the Costume Museum of Madrid and Z Cultural Space Ignacio Zuloaga. Her career as an architect is linked to the work of Rafael Moneo, with whom she worked from 2006 to 2013.

She obtained the Extraordinary Prize in Visual Arts and Design of the Community of Madrid in 2014, and a year later she was awarded in the XIX Call for Aid for Visual Creation, Proposals 2015.

OTHER INFORMATION
Mail: balcoceba@faculty.ie.edu

Contact hours: Available during the week by mail. Meetings on Tuesdays before class.
CODE OF CONDUCT IN CLASS

1. Be on time: Students arriving more than 5 minutes late will be marked as “Absent”.
   Only students that notify in advance in writing that they will be late for a specific session may be granted an exception (at the discretion of the professor).

2. If applicable, bring your name card and strictly follow the seating chart. It helps faculty members and fellow students learn your names.

3. Do not leave the room during the lecture: Students are not allowed to leave the room during lectures. If a student leaves the room during lectures, he/she will not be allowed to re-enter and, therefore, will be marked as “Absent”.
   Only students that notify that they have a special reason to leave the session early will be granted an exception (at the discretion of the professor).

4. Do not engage in side conversation. As a sign of respect toward the person presenting the lecture (the teacher as well as fellow students), side conversations are not allowed. If you have a question, raise your hand and ask it. If you do not want to ask it during the lecture, feel free to approach your teacher after class.
   If a student is disrupting the flow of the lecture, he/she will be asked to leave the classroom and, consequently, will be marked as “Absent”.

5. Use your laptop for course-related purposes only. The use of laptops during lectures must be authorized by the professor. The use of Social Media or accessing any type of content not related to the lecture is penalized. The student will be asked to leave the room and, consequently, will be marked as “Absent”.

6. No cellular phones: IE University implements a “Phone-free Classroom” policy and, therefore, the use of phones, tablets, etc. is forbidden inside the classroom. Failing to abide by this rule entails expulsion from the room and will be counted as one absence.

7. Escalation policy: 1/3/5. Items 4, 5, and 6 above entail expulsion from the classroom and the consequent marking of the student as “Absent.” IE University implements an “escalation policy”: The first time a student is asked to leave the room for disciplinary reasons (as per items 4, 5, and 6 above), the student will incur one absence; the second time it will count as three absences, and from the third time onward, any expulsion from the classroom due to disciplinary issues will entail 5 absences.

14th June 2019