Universidad de Navarra

Comprehensive Lab II (Materials 3D). (Gr. Diseño)

Guía docente 2023-24

INTRODUCTION

Course description

The subjects of Module 4: FORM&MATTER LABORATORIES (Comprehensive Laboratories I and II) offer the students the required resources to complete their formation by means of practice and experimentation, and, therefore, to reach a better understanding of the possibilities offered by the existent relationship between Form and Image and Form and Matter. Students are to acquire a thorough and direct knowledge of the materials, their physical characteristics, and geometry, as well as of the most adequate resources to transform and reshape each of them. Being clearly experimental subjects, the students, learning by doing, manage to develop fundamental skills and abilities for them as future designers. The subject's contents are closely related to those of the subject FORM & IMAGE/ DESIGN PHYSICS BASICS (belonging to Module 2: DESIGN TECHNIQUE). The aim of the subject COMPREHENSIVE LABORATORY II / LABORATORIO DE INTEGRACIÓN II is educating and training the students via experimental practice on the Form and Image issues, using manual, digital, graphic, and plastic techniques in three dimensions (3D).

- **Degree**: Design
- **Module in the Degree Program**: Module 4. Integration Laboratories_ Form & Matter Laboratories_ BASIC
- **Course name/Area:** Comprehensive Laboratory I/Engineering and Architecture
- **Credits:** 6 ECTSs (European Credit Transfer and Accumulation System, 1 ECTS= 25 hours)
- **Year/Semester:** 1st year/2nd semester
- **Type of course:** Required
- **Instructors:**

Cristina Sanz (Architect, Ph.D.) Associate Professor, CIE, email: csanz@unav.es Principal instructor.

Elena Aparicio (Architect, Ph.D.) Teaching Assistant, email: maparicio@unav.es

- **Language:** English
- **Department:** Construction, Facilities & Structures (Construcción, Intalaciones y Estructuras, CIE)
- **Lectures schedule:**

Tuesday, 12:00-14:00, Classroom A2 (GA&GB);

Thursday/Friday 12.00-14:00 (GA/GB) Classroom A2/Studio Room 1

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COMPETENCIES

Basic Competencies

- BC01

Students should have demonstrable knowledge and understanding of an area of study that builds on the base knowledge of general secondary education, and at a level that, although supported by advanced textbooks, also includes aspects that imply knowledge related to the vanguard of the field of study.

- BC03

Students should have the ability to gather and interpret relevant data (normally within their area of study) in order to make judgments that reflect on relevant social, scientific, or ethical issues.

- BC05

Students should have developed the learning and study skills that are necessary for undertaking studies with a high degree of autonomy.

General Competencies

- GC02

Analyze, evaluate, and present the creative qualities of the different technical and material resources in the field of design.

- GC04

Propose, create, and express (both written and verbally) concrete solutions to design challenges that affect today's society.

- GC05

Skilfully manage modern technologies geared toward creation and manufacturing processes specific to the design world.

- GC06

Ability to speak English, B2 level, with knowledge of scientific and academic terminology related to the world of Art, Design, and Applied Arts.

Specific Competencies

- SC01

Use graphic and computer/technological procedures in order to represent concepts, spaces, and objects in Design.

- SC02

Be familiar with the theory of form, as well as the laws of visual perception as they apply to Design.

- SC3

Describe and apply the principles of general mechanics, static, mass geometry, and vector and tensorial fields to the study of design.

- SC04

Know and apply systems of spatial representation to Design.

- SC7

Knowing the composition, as well as the plastic, elastic, and resistance qualities of materials, relating them to the world of design.

PROGRAM

Project 4._PACKAGING

1.1_ PACKAGING: HISTORY & MATERIALS

1.1.1_ History

From flexible packaging (paper&cardboard products) to rigid packaging (glass&metal). Primitive packaging: Discovering glass. From Rome to the Renaissance: Class blowpipe, wooden barrels, and amphorae. China's paper discovery. Barrels and wooden boxes: bulk transport.

The industrial revolution: Paper and cardboard bags and boxes. The origin of the brands: Quaker-Oats persona. Packaging selling the product and informing the customer. First cellulose-based plastics.

The late XXth century: The baby boom. First legislation. The microwave. The XXIst: packaging, intelligent and sustainable. United Nations and packaging. The European Directives. Biodegradable plastics. The disappearing packaging.

1.1.2_ Materials Evolution in time

The earliest materials: Leaves, empty fruits, animal organs, and baskets.

Glass packaging: Glass pots in Egypt, the Phoenicians, and the blowpipe, amphoraes&glass-molding in Greece and Rome, machine glass bottle making in the industrial revolution.

Carton packaging: The folding carton and the cardboard boxes. Milk packaging evolution: gable-top cartons and Tetra pack.

Paper packaging: Paper in China and Japan. XIXth. Wood boxes packaging. Wood-based paper in Europe. The commercial paper bags and boxes.

Metal packaging: Original precious boxes, tinned cans, and flexible metal packaging. Evolution of the cans packaging.

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Plastic packaging: XXth and XXth century inventions: Cellophane, the plastic injection molding machine. New materials: the first plastics, parkelite, rubber, bakelite, and polypropylene. Fridge and microwave packaging. Fast food packaging. Intelligent plastic packaging.

1.2_ PACKAGING: FUNCTIONS & LEVELS

Brand, label, and packaging. Technical and marketing functions. Packaging attributes: extrinsic and intrinsic cues. The container functions. The protect/preserve function. The transport functions. The storage function. The inform/sell function. The Primary package. The secondary package. The distributions package. The Unit loads. Packaging

1.3_ PACKAGING DESIGN

1.3.1_Champagne packaging

Main brands: MC, DP, VC, LP, Ruinart, Krug, and others.

Brand image. Traditional packaging: bottle, label, box.

Designers&Artists'collaborations. Special limited editions. LV, Karl Lagerfeld, David Lynch, Iris van Herpen, Jeff Koons, Marc Newson, Christoffle, Michael Riedel, Xavier Vilehan, Piet Hein Eick, Patricia Urquiola, Nendo, Jaume Plensa, Ron Arad, Patrick Jouin, Georgia Russel, Viktor and Rolf, Virgil Abloh, Philppe Starck, Tokujin Kosioka.

Sustainability.

New concepts: origami boxes, champagne box-ice buckets. Design new patterns and materials.

1.3.2_ Perfume packaging

Origin of perfume and its glass packaging: Egypt, Greece, Rome. Perfume packaging in the Middle Ages: metal packaging. Venetian glass: A la façon de Venise. XVIth to XIXth century packaging. The industrial revolution: from the handmade frask to the mass-produced bottles. Art Nouveau perfume packaging: The Paris World fair. Art Déco. Iconic perfumes and their packaging: Chanel number 5, Shalimar, Arpège, Le Roi Solei, l'Air du Temps, Miss Dior. Pierre Dinard packaging designs: Opium, Armani, Calandre. Contemporary perfume packaging: Le Mâle, Moschino&Comme des Garçons perfumes, Philippe Starck Peaux.

Pattern& perfume packaging: Galop/Hermes, Parco Palladiano/Bottega Veneta.

Materials& perfume packaging: Wood/Dsquared. John Varvatos perfumes.

Typo, label, and bottle/box color palette: Diana Vreeland's collection.

New concept: Le Labo and Rubini's perfumes packaging.

EXERCISES:

E01_ BUILD A PACKAGING BOX&BAG. From a given die-cut of a box and a bag, build a bigger-scale one with a chosen cardboard, redesigning the die-cut as to make a perfectly folded box/bag. Customization of the object (designing the logo, pattern, etc.). Group exercise.

OPTIONAL EXERCISES DAILY: EXTRA POINT IN THE FINAL GRADE

WORKSHOP:

CL II & FM: Making a cardboard box from a given die-cut (6 H)

CLII & DS II: SketchUp (6h)

Project 5._RECYCLING & DESIGN MATERIALS

2.1_SUSTAINABILITY&CIRCULAR ECONOMY

UN: Sustainable development definition and global goals. Circular Economy: The biological and technical cycles.

Environmental pollution: Polutant and pollution definition. Pollution types: causes and consequences. Noise pollution, land pollution, water pollution, light pollution, and air pollution. The Great Pacific garbage patch. Acid rain. The greenhouse effect and climate change. Climate change indicators. Deforestation and desertification. The Ozone depletion. The microplastics we breeze.

2.2_CARBON FOOTPRINT: DESIGN CYCLE & PRODUCTS LIFE CYCLE

Carbon footprint: definition and units. Personal footprint. Countries' footprint (global and per capita) Economic development and carbon emissions, how to reckon the carbon footprint. Product Life Cycle: The circular economy. Product development circle. Sustainable design Phases: Materials sourcing, design, manufacturing, distribution, use, and recovery. The ecological loop: Disposal, Recovery, Recycling, Reusing, and Avoidance.

The design circle- A product's lifecycle- How to recycle paper, clothes, glass, plastic, wood objects, electronic devices, and batteries.

The recycling symbol: history, inspiration, design. Other recycling symbols: types and meanings. Plastic symbols. Glass symbols. The European Commission RICs and Codes. The UE pyramid: Repairing, Reusing, Recycling, Other recycling symbols: Tidyman, the green dot, Seeding for bioplastic, FSC for wood.

EN UNI 840. European recycling colors. Other country's colors.

2.4_FROM RECYCLING TO UPCYCLING

Upcycling definition. Upcycling in history. Europe: Roman architectural elements. Japan: upcycling precious fabrics and ceramics. Wabi Sabi. Arabs: carpets patchwork. Upcycling and DIY: Nendo for COKE and the empty bottle lamp. 100 Chairs in 100 Days and its 100 Ways by M. Gamper. PET Lamp by ACO.

2.6_DESIGN MATERIALS: PROPERTIES, RECYCLABILITY & LYFE CYCLE

Materials in human evolution timeline: From stone to graphene. Design materials classification: families and classes and their properties: Strenght, elasticity, plasticity, ductility, tensile, compressive and shear stresses, malleability and ductility, Material properties charts. Design&production processes. Systems components, joints.

Metals, stones, timber, ceramics, polymers (thermoplastics, thermosetting plastics, and elastomers), Composite and hybrid materials, Advanced materials: semiconductors, biomaterials, and smart and nano-engineered materials.

EXERCISES:

E02_Reckon the personal footprint using the World Wildlife Fund tool. Personal exercise.

E03_NASA webpage on climate change. Take the proposed quizzes and find out more about the issue. Personal exercise.

E04_Recycling test. Find out the relationship between the materials and the recycling possibilities. Use the ECOEMBES information. Personal exercise.

OPTIONAL EXERCISES DAILY

WORKSHOP:

CL II & DSII: Learning basketry. How to weave a basket with new recycled materials. Guest invited: Idoia Cuesta

Project 6_SETs & SERIATION

1.1_COCA-COLA BRAND: LOGO, TYPO, COLOR PALETTE, THE GLASS BOTTLE. DESIGN STYLE GUIDE

Coca-Cola logo design; Typo and color. Other calligraphic logos: Ford, Levi Strauss. Brand image: AEG& Peter Behrens. The Coca-Cola Red Barrel. Coca-Cola core brand typefaces and color palette. The YOU2 typo and the Ovilgy campaign. The Coca-Cola slogans. Logo evolution in time: The wave incorporation. Coke versus Pepsi. The new TCCC.

Coca-Cola bottle and can. The original design of the contour bottle. The Christmas bottle. The Sprite boy. First Coke cans. The king-size bottle. The white Applied Color Labelling bottle by Raymon Loewy. First one-way plastic and glass bottles.

1.2_ COCA-COLA NEW PRODUCTS AND PACKAGING: THE CAN

The 1963 TAB. The Diet Coke. The CocaCola Light. Biggest failure ever: The new Coke. Back to the Classic Coca-Cola. The Cherry Coke new design. 2000: The ultra-glass contour bottle, introducing sustainability. 2009: Green plant plastic bottles. 2005/0 The aluminum contour bottle M5. 2014: New color added to the palette, the green Coca-Cola Life. 2017. Redesigning the cans and labels. Important campaigns: USA BLACK HISTORY. Middle East: LABELS ARE FOR CANS NOT FOR PEOPLE. 2011: MIND YOUR DIET, FOR YOUR HEART SAKE, 2012: The TATTOO CAN.

1.3._ COCA-COLA: SUSTAINIBILITY&MATERIALS

The bottle: from glass to paper. Aluminum cans& bottles, PET bottles. Coca-Cola & Emeco recycled chair. Nendo glassware. The DIY upcycling with COKE.

1.4._ COCA-COLA: DESIGN, ART & FASHION

1.5._ CUSTOMIZING BOTTLES&CANS: THE COLLABORATIONS

International designers and brands. Manolo Blahnik, Comme des Garçons (Rei Kawakubo), Jean Paul Gaultier, Roberto Cavalli, Trusardi, Marc Jacobs, Moschino, Alberta Ferreti, Missoni, Gian Franco Ferré, Diana Von Fustenberg, Karl Lagerfeld, Gianni Versace, Fendi, Zac Posen, Armani, Ferragamo, JW Anderson, Hejazy, Selfridges, Rykiel, Marni,

National designers: D. Defin. L. Delgado, M. Ocariz, A. Arzuaga, Duyos, Devota&Lomba, Francis Montesinos, Verino,

EXERCISES

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E05_ Designing a set of Coke cans, for a determined campaign that must have an interest for the brand, to be explained. Group exercise.

OPTIONAL EXERCISES DAILY

EDUCATIONAL ACTIVITIES

Face-to-face on-site technical lectures and practical classes and workshops. Online/face-to-face seminars and face-to-face and/or online experimental and practical activities and exercises in the classroom, the LAB, or Studio Room 2 (either individually or in groups). Private mentoring. Subject breakdown: ECTSs and hours of engagement, activities, and methodology according to the following.

- TECHNICAL LECTURES (6,00 hours) **0,24 ECTSs**

Attendance and active participation in the theoretical and practical tuition through technical lectures. An active attitude, answering the teacher's questions, and resolving problems proposed in class will be evaluated in a positive way.

(Face-to-face learning, 100 % attendance)

- PRACTICAL CLASSES (54,00 hours) **2,16 ECTSs**

Attendance and active participation in practical classes. Face-to-face meetings of the groups and the teachers, in order to make clear how to put into practice the concepts explained in class, to develop the student's skills and abilities. Depending on each practical work's specific aim, the students will have to concentrate mainly on different aspects and tasks of the making: material execution, graphical aspects, etc.

(Face-to-face learning, 100% attendance)

- SEMINARS (12,00 hours) **0,48 ECTSs**

Attendance and active participation in the practical tuition through seminars in order to develop the student's abilities and skills in a determined technique. An active attitude, and answering the teacher's questions will be evaluated in a positive way.

(Face-to-face learning, 100% attendance)

- GUIDED PRACTICE (45,00 hours) **1,80 ECTSs**

Practical works either individually or in small groups on different matters related to the main contents of the subject.

(Face-to-face, in small groups, or individually, depending on the project/exercise, 10% attendance)

- PRIVATE MENTORING (3,00 hours) **0,12 ECTSs**

Personal interviews with the professors to be counseled about any academic concerns the student may have. Any further consultation regarding other subjects or any other matter related to the student's formation will be also discussed.

(Face-to-face,100% attendance)

- **PERSONAL WORK AND STUDY** (30,00 hours) **1,20 ECTSs**

Learning, training, and developing skills in relation to the knowledge of theoretical concepts as well as in the use of the required digital software and tools by applying them in solving the different exercises and projects.

TOTAL: 6,00 ECTSs

ASSESSMENT

Continuous Assessment

ATTENDANCE CONTROL AND LEVEL OF PARTICIPATION

If the attendance is not 100%, the grade obtained will be proportional to the percentage of attendance. No grade will be obtained if the attendance is minor to the 75%.

PERCENTAGE: 5%

TESTS

Score from 0,0 to 10,0.

To pass the subject, a minimum grade of 5,0/10,0 is required in each one of the three 20 minutes tests of the semester on basic concepts. Any student with a minor grade in any test will have to retake that test again on the date determined for it in the December ordinary call. If the grade is again minor to 5,0, the student will not pass the subject and will have to take a test about all the subject's content in the June call. The final grade in the December and/or June calls will be reckoned with considering the grades obtained in the rest of the exercises and projects of the semester.

PERCENTAGE: 10%

INDIVIDUAL EXERCISES AND WORKS*: E01, E02, and E03

No grade will be obtained if the final mark in any practical exercise or work is D, even if it was submitted on time. But students will have two opportunities to submit each practical work /exercise. Then, if the final mark of the second submittal is higher than D, they will get the corresponding grade.

PERCENTAGE: 40%

GROUP EXERCISES AND WORKS*: E04 and RECYCLING PROJECT

No grade will be obtained if the final mark in any practical exercise or work is D, even if it was submitted on time. But students will have two opportunities to submit each practical work /exercise/project. Then, if the final mark of the second submittal is higher than D, they will get the corresponding grade.

PERCENTAGE: 25%

2 SEM PORTFOLIO, PROJECTS' PRESENTATIONS, AND CONTENT**

PERCENTAGE: 20%

TOTAL PERCENTAGE: 100 %

(*) Practical exercises and works will be graded with A, B, C, and D, according to the following score:

- A (8,0-10,0) A↓ = 8,5 A = 9,0 A↑ = 10,0
- B (6,5-8,0) B↓ = 7,0 B = 7,5 B↑ = 8,0
- C (5,0-6,5) C↓ = 5,5 C = 6,0 C↑ = 6,5
- D (1,0-5,0) D↓ = 1,0 D = 3,5 D↑ = 5,0

Exercises E04 and the SETs&SERIATION project will count double for the reckoning of the final grade. To pass the subject in December, a **media of C↑** is required.

(**) The content of the projects will have to be complete, complying with the requirements of all the subjects of the course. If **the project doesn't comply with the requirements of one of the subjects**, the **maximum grade to be obtained will be limited to a maximum of 7,5** in all the subjects. If it doesn't comply with the requirements of two of the subjects, the maximum grade will be 5,0, and so on.

There will be **two more opportunities to submit the first project if uncompleted** on the date, those of the submittal of **the second and third projects**, and **just one more for the second project**, the date of the submittal of the third and final project. The final grade of the projects will be the one obtained in the last submittal.

The final grade of the May Ordinary Call will be the grade obtained according to the criteria of the former table, for those students having an average grade of at least C+ and having passed all three semester's tests with at least 5.0. The students not complying with both former requirements will have either to pass the failed tests again (in **an exam** that will take place on the date determined for it in the December Exams Official Calendar) or do a practical exercise that will be proposed by the instructors of the subject (to be submitted in the same day the December tests take place).

According to the content of Article 5.4 (Royal Decree 1125/2003), the score of the final grades of the continuous assessment of the semester and the May exam or exercise will adjust to the numeric scale of **0 to 10**, with an accuracy of a decimal place, adding a qualitative grade according to the following:

0,0-4,9 Suspenso (SS)

5,0-6,9 Aprobado (AP)

7,0-8,9 Notable (NT)

9,0-10 Sobresaliente (SB)

MH Sobresaliente y matrícula de honor (SB, MH)

A grade of **5,0/10,0** is required to pass the course.

A MATRICULA DE HONOR mention can be awarded to those students with a grade equal to or superior to 9.0.

December and June Ordinary and Extraordinary Calls

Those students not having passed any of the three tests in the December Ordinary Call will have to pass all of them in the June Extraordinary Call. Students not having passed the practical exercises will have to do a new one proposed by instructors, to be submitted on the same day of the June exams, according to the official calendar. Main criteria and grades score of the December exams. The official June Call exams calendar will be published on the webpage in advance.

As stated in the General Evaluation Regulations of the University of Navarra, approved in May 2019: "*Students who request it may be evaluated in the extraordinary call, even if they have passed in that course. To do this they must request to be included in the minutes at least five days before the start of the exam period of that call. The final grade of the subject will be that of the extraordinary call, even if it is lower than the one obtained previously*".

Those interested must submit an instance through Academic Management choosing the option "convocatoria extraordinaria: solicitud para concurrir (grado)", before the 1st of December (first-semester subjects)/June (second-semester subjects).

Students with Special Learning Needs

Reasonable adjustments will be done for students with special learning needs, either regarding the methodology and/or evaluation of the course, but they will be expected to fulfill all course objectives. Such students must communicate to the Course responsible for their condition in September (first-semester subjects)/January (second-semester subjects).

Course Repeaters

Attendance is required unless any instructor authorizes the absence, for justified reasons. The only difference with the regular students will be the fact that **all the practical exercises and work will be done individually**. In any other matter, the former criteria for the subject will be applied.

ACADEMIC INTEGRITY

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Academic Integrity is a fundamental value, essential to the pursuit of learning and scholarships at the University of Navarra (UN). Participating honestly, respectively, responsibly, and fairly in this academic community ensures that the UN degree that you earn will continue to be valued and respected as a true signifier of a student's work and academic achievement. As a result, the UN treats cases of academic misconduct very seriously.

The University of Navarra's CODE OF CONDUCT/EVALUATION: RULES AND PROCEDURES documents outline the behaviors that constitute academic misconduct, the process for addressing academic offenses, and the penalties that may be imposed. Students are expected to be familiar with them,

(https://www.unav.edu/documents/10162/32684638/Normativa+general+sobre+la+evaluaci%C3%B3n+%28English%29.pdf/455c05fb-ad0e-9083-04b3-1f285832d4d9?t=1588076072000/ https://www.unav.edu/documents/11310/16248366/Code+of+Conduct.pdf)

Potential offenses include, but are not limited to:

IN PROJECTS, EXERCISES, AND ASSIGNMENTS

· Using someone else's ideas or words without appropriate acknowledgment.

· Submitting your own work in more than one course without the permission of the instructor.

· Making up sources or facts.

· Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

ON TESTS AND EXAMS

· Using or possessing any unauthorized aid, including a cell phone.

· Looking at someone else's answers

· Misrepresenting your identity.

· Submitting an altered test for regrading.

MISREPRESENTATION:

· Falsifying institutional documents or grades.

· Falsifying/altering any documentation required by the University, including (but not limited to), medical notes.

The minimum penalty for such offenses is to fail the assignment; the more common penalty is to fail the course. If there is any question about what is or is not permitted in the course, please do not hesitate to contact the course instructor. For any questions about appropriate research and citation students are expected to seek out additional information from the instructor.

Missed Tests and Assignments

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Students who miss a test, exercise, or any assignment for reasons entirely beyond their control (e.g., illness) may submit a request to schedule a makeup in the case of the exercises or assignments. Provided that notification and documentation are provided in a timely manner and that the request is subsequently approved, no academic penalty will be applied.

In such cases, students must notify instructors on the date of the missed exercise /assignment due date and submit supporting documentation (e.g. Verification of Student Illness or Injury Form) within 48 hours of the originally scheduled due date. Students who do not provide the instructor with appropriate or sufficient supporting documentation will be given a grade of 0 (zero) for the missed course deliverable.

Note that the physician's report must establish that the patient was examined and diagnosed at the time of illness, not after the fact. Statements that merely confirm a report of illness made by the student and documented by the physician will not accept a statement. (IN CASE A STUDENT MISSES ANY MIDTERM TEST FOR LEGITIMATE REASONS, HE/SHE WILL HAVE TO REPEAT IT AT THE END OF THE SEMESTER).

Late Assignments

Students who, for reasons beyond their control, are unable to submit an assignment by its deadline must obtain approval from the instructor for an extension. Supporting documentation will be required as per the policy on missed tests and assignments.

Emails

At times, the course instructors may decide to communicate important course information by email. As such, all students are required to have a valid University email address. Students are responsible for ensuring that their university address is set up and properly entered on the University intranet.

ADI

The online course page for this course is accessed through ADI. To access the course page, go to the University portal, log in, and log in using your UN user and password. Once you have logged in, look for the My Courses module where you'll find the link to all your course websites.

Lectures and course materials prepared by the instructors, or the invited guests are considered by the University to be an instructor's intellectual property. Students wishing to record a lecture or other course material in any way are required to ask the instructor's explicit permission and may not do so unless permission is granted (note: students who have been previously granted permission to record lectures as an accommodation for a disability are, of course, excepted). This includes tape recording, filming, photographing PowerPoint slides, ADI materials, etc.

If permission is granted by the instructor, it is intended for the individual student's own study purposes and does not include permission to publish them in any way. It is absolutely forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.

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OFFICE HOURS

Cristina Sanz Larrea (csanz@unav.es). CIE Department office. Day/time to be determined once the 23/24 official schedule is approved. For urgent matters, please make an appointment via email.

BIBLIOGRAPHY

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Basic Bibliography

PACKAGING

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RECYCLING & DESIGN MATERIALS

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SETS&SERIATION

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Other Recommended Bibliography

PAPER BOOKS

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PDF eBOOKS/Articles/Directives:

ENVIRONWISE GUIDE. Packaging: A guide to packaging eco-design

The Dieline TEAM Packaging Dielines I: The designer's Guide to Packaging.

The Dieline TEAM Packaging Dielines II: The designer's Guide to Packaging.

The packaging designer's book of patterns. Free pdf

NATURE (article). The environmental cost of fast fashion.

EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE 94/62/EC of 20 December 1994 on packaging and packaging waste

COCA-COLA ZERO Brand identity

2020 Coca-Cola Design Style

Webs of Interest

PACKAGING

The Dieline — http://www.thedieline.com

Packaging of the World — http://www.packagingoftheworld.com

Lovely Package — http://lovelypackage.com

Packaging Design Archive — http://www.packagingdesignarchive.org

BXP Brand Experience — http://www.bxpmagazine.com/design-packaging

Dezeen — https://www.dezeen.com/tag/packaging

Behance — https://www.behance.net

Package Inspiration — http://www.packageinspiration.com

Beach Packaging Design — http://beachpackagingdesign.com/boxvox

BP & O — http://bpando.org/packaging-reviews

DESIGN MATERIALS &RECYCLING

WWf Carbon footprint calculator --- https://footprint.wwf.org.uk/?VxJw3wfC56=1686586024&Kq3cZcYS15=f974aa3a80924137a28d0aa0da880699&3cCnGYSz89=A3D#/

OUR WORLD IN DATA. Emissions --- https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions

AIRE_ECOEMBES --- https://www.ecoembes.com/proyectos-destacados/chatbot-aire/

SETS&SERIATION

COCA-COLA BRAND IDENTITY --- https://prspot.wordpress.com/2013/02/08/the-identity-of-coca-cola/

Universidad de Navarra

COCA COLA's marketing through 130 years---https://thinkmarketingmagazine.com/3-marketing-lessons-from-coca-cola-130-years-old-brand-identity/

COKE DESIGN --- https://vincevoron.com/project/coke-brand-design-system

IFP: MARKETING INSIGHT FOR PROFESSIONALS COCA-COLA'S 4 most powerful lessons in branding ---- https://youtu.be/mFcPit-A7-4

INTERBRAND_ 2022 report on best world brands ----- https://www.interbrand.com/best-brands

TED Talks

Package design matters TIM HANKINS

https://www.youtube.com/watch?v=Q8Be64oFVLQ

Making the best of a bad situation VANESSAGRONDIN

https://www.youtube.com/watch?v=v08F0YE-k2E

Packaging is for people SILVIA VITALE

https://www.youtube.com/watch?v=Db68SjgC3oY

Why you should design useless things SIMONE GIERTZ

https://embed.ted.com/9dc3ccde-f9b0-4a6b-bbbb-12b3f575a1ca

Microplastics SHARA DUD

https://www.ted.com/talks/sarah_dudas_microplastics_are_everywhere/transcript?language=es

Biofabrication SUZANNE LEE

https://www.ted.com/talks/suzanne_lee_why_biofabrication_is_the_next_industrial_revolution/transcript

The environmental footprint of a T-shirt ANGEL CHANG

https://youtu.be/BiSYoeqb_VY

Did paper beat plastic? LAYLA ACAROGLU

https://www.ted.com/talks/leyla_acaroglu_paper_beats_plastic_how_to_rethink_environmental_folklore?utm_campaign=tedspread&utm_medium=referral&utm_source=tedcomshare

Cradle-to-cradle design WILLIAM MCDONOUGH

https://www.ted.com/talks/william_mcdonough_cradle_to_cradle_design?utm_campaign=tedspread&utm_medium=referral&utm_source=tedcomshare

What nonprofit organizations can learn about Coca-Cola MELINDA GATES

Universidad de Navarra

https://www.ted.com/talks/melinda_gates_what_nonprofits_can_learn_from_coca_cola?utm_campaign=tedspread&utm_medium=referral&utm_source=tedcomshare