



## 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 through practice and experimentation, and, therefore, to reach a better understanding of the possibilities provided by the existing 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. As clearly experimental subjects, the students, learning by doing, manage to develop fundamental skills and abilities that will serve them well 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 to educate and train the students via experimental practice on the Form and Image issues, using manual, digital, graphic, and plastic techniques in three dimensions (3D).

<b>Degree</b>	Design
<b>Module in the Degree Program</b>	Module 4. Integration Laboratories_ Form & Matter Laboratories_ BASIC
<b>Course name/Area</b>	Comprehensive Laboratory I/Engineering and Architecture

- **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:** 1<sup>st</sup> year/1<sup>st</sup> semester
- **Type of course:** Required
- **Instructors:**

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



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

● **Language:** English

● **Department:** Construction, Facilities & Structures (Construcción, Instalaciones y Estructuras, CIE)

● **Lecture schedule:**

Friday, 9.00-11:00, Classroom A5/Studio Room 3, (GA) and Friday, 11:00-13:30, A5/SR 3 (GB)

## LEARNING OUTCOMES (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 at which, 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) 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

Skillfully 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.

- SC04

Know and apply systems of spatial representation to Design.

## PROGRAM

### Project 1\_ TYPOGRAPHY

#### 1.1\_ABOUT TYPOGRAPHY

##### 1.1.1\_ Origin

From the first alphabet to the Guttenberg Bible.

##### 1.1.2\_ Evolution in history

From gothic to sans serif typos, characters profile/design evolution, and typo classification. Type tree chart. Typo classification.

##### 1.1.3\_ Typo Anatomy

Terminology. Dimensions.

##### 1.1.4\_ Concepts and scale

Typography, typeface, font. EM&EN. Point&Pica. Diatonic&Double stranded Fibonacci series. Open, postscript, and true type fonts for Windows and MAC OS.

##### 1.1.5\_ Typo readability

The IL1 test, paper, and screen typos. Apple fonts: Motter Tektura, Apple Garamond, Myriad Pro, and the newest San Francisco.

##### 1.1.6\_ Logo design

Typo logo design. Scale & beauty: The golden rule and the rule of the third. The Fibonacci series. IBM logo design and evolution: Paul Rand. Apple logo design and evolution: Rob Janoff & Steve Jobs. The London Underground logo.

##### 1.1.7\_ Page layout



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Typo font: weight, axis, and width. Black & white dégradé: grey scale. Small caps. Upper and lower case. Map of characters. Kerning and tracking. Paragraph text-alignment. Rag, orphans, widows, line spacing. Canons of text page construction: Van de Graff, Golden & Tschichold canons.

## 1.1.8\_ Calligraphique typos

Signature & calligraphique logos. Fashion typo logos evolution in time. YSL logo: A.M. Cassandre.

## 1.1.9\_ The Vignelli canon

The tangibles. ISO paper formats. Grids, margins, and columns. Grids for books, magazines, or companies' letterheads. Layouts and sequence. Visual power. Contrasting type sizes. White space. Vignelli's works: American Airlines, New York Underground, and Knoll.

## 1.1.10\_ Printing

Pixels, dpi, ppi. Printing techniques & profiles. Quality in printing. Text and image sizes for web or print.

## 1.1.11\_ Brand image

Image of a brand: Typos included. Color palette. Logos. Logo's terminology.

## 1.2\_ TYPOGRAPHY EXPRESSIVENESS

### 1.2.1\_ Composition & Page layout

Contrast, repetition, alignment, proximity.

### 1.2.2\_ Expressive typo: words, pages, posters, and others

Examples of words, paragraphs, and pages. Bruno Munari: typos, names, and talking objects. Apollinaire caligrammes: when the text becomes an image. Poster design: Toulouse Lautrec, Van de Velde, El Lissitzky, Bernhard, Matter, Fukuda. Alexander Brodovitch for Harper's Bazaar. Saul Bass: Movie title's expressiveness.

## EXERCISES:

**E1\_ LETTER DESIGN AS AN OBJECT.** Drawing by hand a Garamond/Times New Roman upper /lower case character (A3 scale). Anatomy of the character.

**E2\_ SANS SERIF GEOMETRY.** Drawing with AUTOCAD the Futura/Helvetica & character. Dimensions. Origin and use of the character.

**E3\_ GRIDS&LAYOUT.** Magazine/catalog/brochure grid analysis.

OPTIONAL EXERCISES DAILY

## WORKSHOPS

CLI&FI: Adobe InDesign (6 h)

CL I: AutoDESK AutoCAD (2 h)

## Project 2\_COLOR



## 2.1\_VISUAL PERCEPTION

### 2.1.1\_ Color Perception

Gestalt principles: Reification/closure, proximity, continuity, emergence, similarity/anomaly, multistability. Synesthesia: Kandinsky. Color blindness. Optical illusions: Blivet, Bezold effect, Herman grid, Ebbinghaus&Chubb illusions. The Jastrow, Orbison& Poggendorf geometrical illusions. Hering grid. Escher impossible drawings. Booba& Kiky. Sugihara: the impossible possible.

### 2.1.2\_ Color Systems & Models

History. Color linear systems: Aristotle, Chakidius, B. Anglicus, Da Vinci, and Fludd. Color multilinear systems: Avicena, Al Tusi, Alberti, Forsius, and Glissom. Newton hue circle. Hue: CIELAB model. HVC (Hue, Value& Chroma): The Munsell color system. Goethes'psychology of color.

HSL/HSB (Hue, Saturation & Value, computers color model) RGB (additive colors: the color of light, screen mode), CMY&K (subtractive colors: the color of materials, pigments, paints, and prints) HEX. Print&screen color. PMS (Pantone matching system) & The Color of the Year. The Pantone charts. RAL color standard. Complementary colors and harmonies. Greyscale. New colors: the blue Klein. Color-models' equivalences. Computers color wheels and modes: Word, Excel, In Design, Photoshop. CMYK offset printing.

### 2.1.3\_ Color & Design

Color combination: Pure color, complementary colors, split, triad, tetradic combinations, monochromatic combinations.

Color palettes: Graphic design, object design, and fashion design. Color context. Color in brand image.

## 2.2\_ COLOR EXPRESSION

### 2.2.1\_ Color&Culture

Color in history. Green according to Egypt, the Mayas, Greece, Rome, the Celtic myths, China&Japan, Islamic cultures, Scotland, and Ireland traditions. Flag colors and culture. The global color survey.

### 2.2.2\_ Color&Psychology

Eva Heller: The psychology of color. NIVEA Blue, the most appreciated color. Color and emotions. Color choice in marketing. Color and brand identity. Green& Sustainability.

### 2.2.3\_ Color&Symbolism

Color and language. Flag color's symbolism. Black& White in the East and the West. Red in Japan. Other symbolic references.

## EXERCISES:

**E4\_ BUILDING A COLOR CUBE.** Based on the color palette of a feeling, according to the survey in which Eva Heller's *Psychology of the Color* book (first week, individual/group exercise). An individual statement, group statement, MDF cube with printed cover.



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**E5\_ CAMPUS TREES PANTONE POSTER**, (Individual and group exercise). Individual leaves color and poster layout. Group poster.

**E6\_ PE Personal skin RGB/CMYK color.**

OPTIONAL EXERCISES DAILY

## **WORKSHOP:**

CL I & DS I: ADOBE PhotoShop (6 h)

### **Project 3:\_SCALE &PATTERN**

#### **3.1\_PATTERN & FABRICS HISTORY**

From Egyptian linen fabrics to spandex.

#### **3.2\_ FABRICS**

Spinning, weaving/knitting, and finishing. Woven fabrics: Types of weaving. Non-woven fabrics: Bonding and felting. Natural fibers diameters. Shatoosh. Fabric materials: from the original natural fabric to the synthetic newest ones. Synthetic fabric use. Fabric atural tints, hand-painted patterns, screen printing, offset printing, digital printing.

#### **3.3\_ PATTERNS DESIGN**

Traditional patterns. Medieval Central and East Europe traditional patterns. Male and female patterns. Patterns color palettes. Damask. Paisley and the ETRO redesigns. Ikat. Indigo dyeing: Shibori and batik. Denim and indigo jeans: Jacques de Nîmes, Jacob Davis, and Levi Strauss.

The Arts& Crafts patterns: William Morris textile, wallpaper, and tiles patterns. Liberty&Co. The Vans collaboration. Art Nouveau & Art Deco patterns. Bauhaus patterns: when women were only allowed to design textiles. Annie Albers, Guntä Stolz, Benitta Koch Otte, Otti Berger. Sonia Delaunay: patterns everywhere and the Japanese influence. Lucienne Day every day's patterns. African patterns. Native American patterns.

The contemporary pattern brands: Marimekko and Marija Isola, Sou-Sou and Wakisaka, Maharan and Paul Smith, Missoni. Polka dots revised: Comme des Garcons, Rei Kawabubo, Vuitton, and Yayoi Kusama. Carpet and tapestry pattern in Spain: From the Royal Fabric to Nani Marquina.

#### **3.4\_HOW TO DESIGN A PATTERN**

Rapport and repetition. Phases of the design. Handmade rapport. Digital pattern design using Photoshop. Scale: rapport and pattern scales. Printing profiles.

#### **3.5\_ NEW 3D FABRICS**

Miyake cut&stick fabric, 3D steam stretch fabric, Omoiio color palette maker, baked fabric, and foldable fabric.

#### **3.6\_ PATTERNS DESIGN TRENDS**

Prada (stripes), Missoni (variations on the triangular pattern), Dolce&Gabbana (crazy themes), Del Pozo & Valentino (positioned patterns), Mary Katranzou (digital printing, Bauhaus), Dries van Notten (flower prints), Balenciaga (new themes), Miu Miu (sixties revival), Marni (geometrical patterns), Ailanto (Japanese influence, flowers. Stripes), Raf Simons



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(stripes), Marc Jacobs (polka dot, B&W), Iris van Herpen (3D illusions), JE Anderson (William Morris meets punk). Fabric pattern trends. Logomania: Logos in pattern design. The Loewe logo evolution and logo patterns derived. Hermes: Scarves and ties patterns design and logo.

## EXERCISES:

**E7\_** Design a pattern for a men's tie or for a women's scarf, freestyle, including three different color palettes for a set of a determined brand. Hand sketches, digital files, and paper printed samples (scale 1:1).

OPTIONAL EXERCISES DAILY: EXTRA POINT TO BE ADDED TO THE FINAL GRADE

## WORKSHOP:

CL I: Adobe Photoshop (3 h) Designing a textile pattern: rapport and repetition. Printing profile.

## 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 h) 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 h) 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, and 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 h) 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 h) 1,80 ECTSs



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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 h) 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 h) 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 less than 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-minute tests of the semester on basic concepts. Any student with a minor grade in any test will have to retake that test on the date determined for it in the December ordinary call. If the grade is again minor to 5/10, the student will not pass the subject and will have to take a test about all the subject's content in 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, E06 and E07

No grade will be obtained if the final mark in any practical exercise or work is D, even if it was submitted on time. All the 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.



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## PERCENTAGE: 40%

GROUP EXERCISES AND WORKS\*: E03, E04 and E05

No grade will be obtained if the final mark in any practical exercise or work is D, even if it was submitted on time. All the 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: 25%

PROJECTS' PRESENTATIONS AND CONTENT\*\*

## PERCENTAGE: 20%

## TOTAL PERCENTAGE: 100 %

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

- A (9,0-10,0) A ↓ = 9 A = 9,5 A ↑ = 10,0

- B (7,5 -8,5) B ↓ = 7,5 B = 8 B ↑ = 8,5

- C (6,0 - 7,0) C ↓ = 6 C = 6,5 C ↑ = 7

- D (4,5 -5,5) D ↓ = 4,5 D = 5 D ↑ = 5,5

- E (<4,5)

Exercises E05, E06, and E07 will count double for the reckoning of the final grade. To pass the subject in December, a **media grade 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 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.

## **DECEMBER ORDINARY CALL**

The final grade of the December 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 semesters' 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).



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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.

## JUNE EXTRAORDINARY CALL

Those students who have not passed any of the three tests in the December Call will have to pass all of them in the June Extraordinary Call. Students who have failed the practical exercises will have to pass 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 1<sup>st</sup> of December (first-semester subjects)/June (second-semester subjects).

## STUDENTS WITH SPECIAL LEARNING NEEDS

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

## COURSE REPEATERS

Attendance is required unless an instructor authorizes the absence for justified reasons. The only difference with regular students will be 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, respectfully, 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 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

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



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or assignments. Provided that notification and documentation are provided promptly and that the request is subsequently approved, no academic penalty will be applied.

In such cases, students must notify instructors of 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 be accepted. (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 guests are considered by the University to be their 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 study purposes and does not include permission to publish them in any way. It is forbidden for a student to publish an instructor's notes on a website or sell them in any other form without formal permission.

## **OFFICE HOURS**

Cristina Sanz Larrea (csanz@unav.es)

Office in the CIE Department, day and time to be determined once the 25/26 schedule is approved. For urgent matters, please make an appointment via email



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## BIBLIOGRAPHY AND RESOURCES

Dardi, D., Pasca, V., Auerbach-Lynn, B., & Turnbull, K. (2019). *Design history handbook*. Silvana. [Find it in the library](#)

Munari, B., Artal Rodríguez, C., & Romaguera y Ramió, J. (1985). *¿Cómo nacen los objetos?* (2ª ed.). Gili. [Find it in the library](#)

Mari, E. (2021). *Autoprogettazione?* (Prima edizione, agosto 2002. Undicesima ristampa, giugno 2021.). Edizioni Corraini.

Sudjic, D. (2009). *The language of things: understanding the world of desirable objects* (1<sup>st</sup> American ed.). W.W. Norton & Company. [Find it in the library](#)

Papanek, V. (2011). *Design for the real world: human ecology and social change* (2nd ed., completely rev.). Thames & Hudson. [Find it in the library](#)

Rodgers, P., & Milton, A. (2011). *Product Design*. Laurence King Publishing. [Find it in the library](#)

Ambrose, G., & Harris, P. (2010). *Design Thinking*. AVA Publishing

Delft Design Guide: Perspectives, Models, Approaches, Methods (2020) [Find it in the library](#)

*Fashion: the definitive visual guide / foreword by Caryn Franklin*. (2019). DK.

Han, B.-C., & Chamorro Mielke, J. (2021). *No cosas: quiebras del mundo de hoy* (Primera edición: octubre de 2021.). Taurus. [Find it in the library](#)

### BASIC & SPECIFIC BIBLIOGRAPHY (PRINTED PAPER BOOKS/eBOOKS)

#### TYPO

Munari, B., & Serra i Cantarell, F. (2016). *Diseño y comunicación visual: contribución a una metodología didáctica* (2ª ed.). Gustavo Gili. [Find it in the library](#)

Frutiger, A. (2007). *Signos, símbolos, marcas, señales* (1ª ed., 9ª tirada.). [Gustavo Gili. Find it in the library](#)

Fiell, C. (1965-). A. (2005). *Graphic design for the 21<sup>st</sup> century = Grafikdesign im 21. Jahrhundert = Le design graphique au 21<sup>e</sup> siècle* / Charlotte & Peter Fiell. Taschen. [Find it in the library](#)

Bierut, M. (1957-). A. (2021). *How to use graphic design to sell things, explain things, make things look better, make people laugh, make people cry, and (every once in a while) change the world* / Michael Bierut. Thames & Hudson. [Find it in the library](#)

Frutiger, A., Chamorro Mielke, J., & Zimmermann, Y. (2007). *El libro de la tipografía*. Gustavo Gili. [Find it in the library](#)

Coles, S. (2013). *Geometry of type: the anatomy of 100 essential typefaces* / Stephen Coles; forew. by Erik Spiekermann. Thames & Hudson. [Find it in the library](#)



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Kane, J., Dávila, M., & Giménez, D. (2012). *Manual de tipografía* (2ª ed. rev. y amp.). Gustavo Gili. [Find it in the library](#)

Lupton, E. (2011). *Pensar con tipos. [Recurso electrónico]: una guía clave para estudiantes, diseñadores, editores y escritores.* Gustavo Gili. [Find it in the library](#)

Tondreau, B. (2019). *Layout Essentials Revised and Updated: 100 Design Principles for Using Grids.* Rockport Publishers. [Find it in the library](#)

Richard Poulin. (2018). *Design School: Layout: A Practical Guide for Students and Designers.* Rockport Publishers. [Find it in the library](#)

Timothy Samara. (2017). *Making and Breaking the Grid, Second Edition, Updated and Expanded: A Graphic Design Layout Workshop: Vol. Second edition updated and expanded.* Rockport Publishers. [Find it in the library](#)

## COLOR

Goethe, J. W. von, & Eastlake, C. L., Sir. (2014). *Goethe's Theory of colours.* [Recurso electrónico] : translated from the German, with notes. Cambridge University Press. [Find it in the library](#)

Albers, J. (1994). *Josef Albers glass, color, and light.* Catálogo exposición Guggenheim Museum

Albers, J., & Weber, N. F. (2006). *Interaction of color* (Rev. and expanded ed.). Yale University Press. [Find it in the library](#)

Aaris Sherin. (2011). *Design Elements, Color Fundamentals: A Graphic Style Manual for Understanding How Color Affects Design.* Rockport Publishers. [Find it in the library](#)

Heller, E., & Chamorro Mielke, J. (2012). *Psicología del ómo actúan los colores sobre sentimientos y razón* (1ª ed.). GG, Editorial Gustavo Gili. [Find it in the library](#)

Pastoureau, M. (2009). *Black: the history of a color.* Princeton University Press. [Find it in the library](#)

Eiseman, L. (2011). *Pantone: the 20th century in color.* Chronicle Books. [Find it in the library](#)

The Complete Color Harmony, P. E. E. C. I. for P. R. F. P. (2020). *The Complete Color Harmony, Pantone Edition: Expert Color Information for Professional Results.* [Find it in the library](#)

Regina Lee Blaszczyk, & Ben Wubs. (2018). *The Fashion Forecasters: A Hidden History of Color and Trend Prediction.* Bloomsbury Visual Arts. [Find it in the library](#)

Eiseman, I. (2006). *Color: messages and meanings.* (n.d.). Handbooks Press. [Find it in the library](#)

## PATTERNS

Textilepedia: *The complete fabric guide* (2020). Fashionary International Ltd. [Find it in the library](#)

Hallett, C., & Johnston, A. (2014). *Fabric for Fashion: The Complete Guide.* Laurence King Publishing.



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Hallett, C., & Johnston, A. (2014). *Fabric for fashion: The swatch book: with 125 sample fabrics* (revised 2<sup>nd</sup> ed. 2021). Laurence King. Find it in the library

Baugh, G. (2011). *The fashion designer's textile directory: the creative use of fabrics in design*. Thames & Hudson. [Find it in the library](#)

Howellm K.A. (2015), *Color and Pattern: 50 Playful Exercises for Exploring Pattern Design*. Rockport Publishers.

Postrel, V. (2020) *The Fabric of Civilization: How Textiles Made the World*. Basic Books. [Find it in the library](#)

#### **BASIC BIBLIOGRAPHY (AVAILABLE IN FREE PDF)**

The Vignelli Canon. Massimo Vignelli.

The Measure of Man. Human Factor in Design. Henry Dreyfuss

Objects dimensions and architectural data: NEUFERT. Ernst Neufert

#### **OTHER WEB RESOURCES&TOOLS**

##### **FREE FONTS WEBPAGES**

<https://www.dafont.com/es/>

<https://www.myfonts.com/WhatTheFont/>

<https://www.fontsquirrel.com/matcherator>

<https://www.whatfontis.com/>

<https://www.fonts.com/>

##### **COLOR PALETTE GENERATORS**

[https://colors.muz.li/?utm\\_source=colorslist\\_medium&utm\\_medium=blog%20post&utm\\_campaign=color%20tools](https://colors.muz.li/?utm_source=colorslist_medium&utm_medium=blog%20post&utm_campaign=color%20tools)

<https://artsexperiments.withgoogle.com/artpalette/colors/241c1f-6b5637-c25118-c0a44b-c7b495>

<https://colorable.jxnblk.com/>

##### **COLOR CONVERTERS**

<https://convertacolor.com/>

<https://codebeautify.org/rgb-to-pantone-converter>

##### **TED Talks**

The secret language of letter design MARTINA FLOOR

<https://embed.ted.com/dd995edf-f7fe-4e77-9dee-fd2386687eb1>

The first secret of design is... noticing TONY FADELL



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<https://embed.ted.com/cf0d8557-1806-42de-8d17-0e7cab3b832b>

The simple genius of a good graphic TOMMY McCALL

<https://embed.ted.com/5b183577-d703-40b6-ad5e-0fc1c99e3283>

Design is in details PAUL BENNETT

[https://www.ted.com/talks/paul\\_bennett\\_design\\_is\\_in\\_the\\_details](https://www.ted.com/talks/paul_bennett_design_is_in_the_details)

Creativity and play TIM BROWN

[https://www.ted.com/talks/tim\\_brown\\_tales\\_of\\_creativity\\_and\\_play](https://www.ted.com/talks/tim_brown_tales_of_creativity_and_play)

Treat design as art PAOLA ANTONELLI

[https://www.ted.com/talks/paola\\_antonelli\\_treat\\_design\\_as\\_art](https://www.ted.com/talks/paola_antonelli_treat_design_as_art)

Design objects that tell a stories YVES BEHAR

[https://www.ted.com/talks/yves\\_behar\\_designing\\_objects\\_that\\_tell\\_stories](https://www.ted.com/talks/yves_behar_designing_objects_that_tell_stories)

We are all designers JOHN HOCKENBERRY

[https://www.ted.com/talks/john\\_hockenberry\\_we\\_are\\_all\\_designers](https://www.ted.com/talks/john_hockenberry_we_are_all_designers)

Think big TIM BROWN

[https://www.ted.com/talks/tim\\_brown\\_designers\\_think\\_big](https://www.ted.com/talks/tim_brown_designers_think_big)

Why design PHILIPPE STARCK

[https://www.ted.com/talks/philippe\\_starck\\_design\\_and\\_destiny](https://www.ted.com/talks/philippe_starck_design_and_destiny)

Happiness by design STEPAHN SAGMEISTER

[https://www.ted.com/talks/stefan\\_sagmeister\\_happiness\\_by\\_design](https://www.ted.com/talks/stefan_sagmeister_happiness_by_design)

How the button changed fashion ISAAXC MIZRAHI

[https://www.ted.com/talks/isaac\\_mizrahi\\_how\\_the\\_button\\_changed\\_fashion?  
utm\\_campaign=tedspread&utm\\_medium=referral&utm\\_source=tedmshare](https://www.ted.com/talks/isaac_mizrahi_how_the_button_changed_fashion?utm_campaign=tedspread&utm_medium=referral&utm_source=tedmshare)

Fashion for futures SUZY VAUGHAN

<https://youtu.be/NkjNxCzBUqQ>

INTERVIEW TO DRIES VAN NOTTEN

<https://youtu.be/r2KSTJNjvIE>