Universidad de Navarra

Comprehensive Lab IV (Gr. Diseño)
Guía docente 2026-27

INTRODUCTION

Course Description:

Laboratories of Matter and Form provides students with essential resources to complement their training through hands-on practice, experimentation, and a deeper understanding of the dynamic relationship between matter and form. The course fosters direct engagement with materials, exploring their physical properties, geometric configurations, manipulation possibilities, and the most suitable technical means for their transformation.

This subject is fundamentally experimental, promoting learning through doing. It enables students to develop key skills and competencies essential for their future roles as designers.

The course is part of **Module 4: Comprehensive Lab**, within **Subject 2: Laboratories of Technologies and Production Systems**.

- **Degree**: Grado en Diseño/ Degree in Design
- **Module in the Degree Program**: Module 4 "Comprehensive Laboratories", subject "Laboratories of Technologies and Systems of Production"
- **Number of credits**: 6 ECTS
- **Year and semester**: Second year and second semester
- **Type of course**: Mandatory
- **Instructors**: Responsible teacher: María Fernández-Vigil Iglesias (mfernandez-@unav.es); Marina Vidaurre (mvidaurre@unav.es), PAD: María Duro (mdurom@unav.es). Invited teachers for the workshops and projects.
- **Language:** English
- **Department:** Department of Building Contruction, Services and Structures
- **Lecture schedule**: Aula 1 and Taller 2B. Tuesdays from 12:00 to 14.00 and from 15: 00 to 17:00 h.



LEARNING OUTCOMES (Competencies)

BASIC

BC1 – 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 text books, also includes aspects that imply knowledge related to the vanguard of the field of study.

BC3 – Students should have the ability to gather and interpret relevant data (normally within their area of study) in order to make judgments that reflection on relevant social, scientific or ethical issues.

BC5 – Students should have developed the learning and study skills that are necessary for undertaking studies with a high degree of autonomy.

GENERAL

GC2 – Analyze, evaluate and present the creative qualities of the different technical and material resources in the field of design.

GC4 – Propose, create and express (both written and verbally) concrete solutions to design challenges that affect today's society.

GC5 – Skillfully manage modern technologies geared toward creation and manufacturing processes specific to the design world.

GC6 – 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

SC1 – Use graphic and computer/technological procedures in order to represent concepts, spaces, and objects in design.

SC2 – Be familiar with the theory of form, as well as the laws of visual perception as they apply to design.

SC6 – Know the concepts and techniques utilized in applied, traditional and contemporary arts, as well as their application to design.

SC7 – Know the composition, as well as the plastic, elastic, and resistance qualities of materials related to the world of design.

SC10 – Know the systems and industrial manufacture processes specialized according to the different fields of design.

PROGRAM

During this course, students are provided with a range of tools that they will later apply in their careers as fashion, product, or service designers. The topics covered fall within the framework of the integrated projects, which are common for the rest of the courses in the semester. Throughout the course, students will develop two main projects (P), which will also include various workshops (WS) and exercises (E) as part of the ongoing assessment:

P03. Transformation - Service Design

This project focuses on the application of fundamental tools of service design, with particular emphasis on the research and ideation phases. Students will be introduced to production systems within service providers and product–service systems, enabling them to understand the broader context of service-based design approaches.

P04. Reproduction - Speculative Design

This project introduces the principles of speculative design. Students will begin with in-depth research to define a plausible future ecosystem and then proceed to prototype a representative element that embodies the envisioned scenario. The project emphasizes critical thinking and design as a tool for speculation and foresight.

In addition to tools related to service design and the prototyping process, the course also includes specific exercises focused on:

- Creating technical drawings
- Working with various materials (ceramics, plastics, glass, metals)
- Understanding different types of material joints.

The detailed distribution of hours, interim submissions, and final deliverables will be communicated in coordination with the overall course schedule.

Universidad de Navarra

SERVICE-LEARNING (ApS)

This subject obtained the **Service-Learning Seal** since 24-25. Service-Learning (ApS in Spanish) is a teaching methodology that combines curricular content and competency-based learning with active service to the community. Students in the course engage with real needs from their local environment.

Through Design Thinking tools, the project P03 - Service Design, students collaborate with several associations in Pamplona and different vulnerable groups to better understand their experiences and needs. Using **Design Thinking tools**, the project fosters a space for mutual learning, where the stories and challenges of migrants, elderly people... inspire innovative and empathetic solutions. It builds a bridge between design and reality, imagining a more inclusive future together.

Specifically, the first phase focuses on research. Each student group is assigned to one association through which they will conduct fieldwork. This includes interviews and co-design activities with both members of the association and vulnerable population who benefit from their services.

The second phase consists of a co-creation workshop, where students, associations, and users gather at the School of Architecture to participate in idea-generation sessions. This event is organized by the School of Architecture in collaboration with Tantaka, the university's solidarity and volunteer platform.

This teaching method aims at providing a more human-centered approach, focused on the individual and free of biases, to the services offered by organizations working with vulnerable population groups in Pamplona, and to raise the visibility of these organisations within the university. Finally, two aspects of Service in society come together in P1. On the one hand, the methodology through which we will approach the project is that of Service Design which reflects on the role of Design contributing to better services in society. This is a core Learning outcome of the course. On the other, the context and content of the project aims at having an impact in society through Service-Learning. This is a methodology that understands education as a service to society. Combining the two approaches, Service Design and Service Learning, the project fosters a more holistic approach to the questions of contemporary migrations in Europe.

SERVICE-LEARNING CHARACTERISTICS (ApS)

Need satisfied in society: The project addresses critical social needs within the local community of Pamplona. First, it provides a deeply human-centered, empathetic, and bias-free approach to the administrative and social services offered by local organizations working with different groups (migrant communities, elderly people...). By applying Service Design methodologies, students collaborate with these associations to redesign and optimize user experiences based on the real, lived challenges of the proposed vulnerable group. Second, the project raises the institutional visibility of these non-profit organizations and their vital societal roles within the broader University of Navarra community, facilitated through the Tantaka solidarity platform.

Evaluation of the activity within the subject: The Service-Learning project is fully integrated into **P03: Service Design**, which is assessed under the **SE02 Practical Exercises** category (accounting for the core practical evaluation of the semester). Student performance is measured across three main progressive milestones:

1. *Fieldwork and Research Quality:* The execution of contextual desk research, interviews, and active participation in the co-design activities with assigned associations and migrant users.

2. *Co-creation Engagement:* Active participation and facilitation quality during the collaborative idea-generation workshop held at the School of Architecture.
3. *Service Design Tools:* The technical and conceptual rigor of the final service-design tools used.

Coherence with the course objectives: This activity directly aligns with the core learning outcomes of Comprehensive Lab IV, specifically fusing **Service Design** (understanding the role of design in delivering optimal social services) with **Service-Learning** (utilizing education as an active service to society). It provides a real-world testing ground for students to apply complex *Design Thinking* tools to real user touchpoints. By shifting from abstract scenarios to complex migration contexts, the project ensures students master service prototyping, user journey mapping, and co-creation frameworks through an inherently applied, human-centric lens.

Social competencies and civic skills acquired by the student: Grounded in a *Human-Centered Design* approach, students develop essential civic and interpersonal skills:

- *Approaching Complex Realities:* The capacity to understand structural social, political, and cultural factors surrounding contemporary migration and vulnerability.
- *Empathy and De-biasing:* The ability to conduct non-judgmental active listening, transforming raw personal narratives into compassionate, inclusive design solutions.
- *Civic Collaboration:* Adapting professional design work to the specific tempos, constraints, and needs of local social entities.

Professional competencies:

- *Strategic Service Prototyping:* Ability to model, map, and evaluate production systems within service providers and product-service systems.
- *Co-Design Methodologies:* Skillful management of participatory design sessions, co-creation frameworks, and stakeholder engagement workshops involving diverse, multicultural user groups.
- *Socially Responsible Design:* Understanding that design interventions are not neutral but carry profound ethical consequences, framing future designers as active contributors to public welfare and equity.

Reflection activities carried out by the students: The project operates under the pedagogical framework **"Design Against Bias,"** requiring students to systematically question pre-established misconceptions regarding immigration. Reflection is developed together with Design Studio:

EDUCATIONAL ACTIVITIES

The subject has an eminently applied character, with a combination of technical and practical sessions according to the calendar that is given to the students in the first class of the semester.

The training activities include face-to-face sessions in the classroom and workshop, as well as practical sessions in the School Workshops, with specific development for each of the competences that the student must achieve.

Universidad de Navarra

Outside of class time, students can attend tutorials with the faculty and, in a non-face-to-face manner, they will have to carry out directed work supported by personal study.

AF01 Attendance and participation in theoretical face-to-face classes (6 h)

Attendance and participation during the theorical lessons. The active participation and the answers to the questions that the teacher makes are valued.

AF02 Attendance and participation in practical face-to-face classes (54 h)

Attendance and participation during the theorical lessons. The active participation and the answers to the questions that the teacher makes are valued.The course is divided in two phases, corresponding to the two main projects.

Apart from the project itself, the students will carry out different exercises related to the project topic.

AF03 Seminar's participation (12 h)

Throughout the course, two seminars will be held. Since these workshops are part of the final mark, participation will also be taken into account.

AF04 Tutor-driven exercises (individual and in groups) (45 h)

AF05 Office hours (3 h)

AF06 Personal work and study (30 h)

Time dedicated to the study of the subject and the preparation of the different training activities.

ASSESSMENT

ORDINARY CALL

SE01 **Attendance control and level of participation* 20%**

Attendance and active participation in lectures, practical sessions, masterclasses, and workshops will be assessed. This percentage does **not** refer exclusively to physical attendance, but also to the quality and consistency of the work produced during class sessions. Therefore, throughout the course, **three in-class exercises will be randomly evaluated**.

SE02 **Practical exercises (individual/team) 60%****

This includes:

- Individual and group practical exercises specific to the Laboratory (three exercises: E01, E02, and E03) 50%
- The workshops conducted throughout the semester with guest lecturers 10%

Integrated projects 10%

Evaluation of the student's involvement and performance in the Integrated Design Projects developed during the semester.

SE03 **Exams 10%**

SE04 Activity to be developed during the academic trip +10% (This extra percentage will only be added if the student passes the course).

Important Notes:

** Attendance Requirement: Students must attend at least 80% of the classes. Failure to meet this requirement will result in the loss of the right to be evaluated for the full course.*

*** Only the exercises scored over 4.0 will be considered for this mark. To pass the course, students must obtain an* ***average mark of 5.0 or above*** *out of 10* ***in the Laboratory exercises.***

EXTRAORDINARY CALL

Final exam of theoretical knowledge and development of an individual project according to the criteria of the teaching staff.

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 the course 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".

Therefore, the grade obtained in the extraordinary call will be the valid one, regardless of that obtained in the ordinary call, even the student may not pass the subject if he or she fails to attend.

Those students interested must submit an instance through *Gestión Académica* choosing the option "*convocatoria extraordinaria: solicitud para concurrir (grado)*", before the extraordinady exams term.

STUDENTS ON SECOND OPPORTUNITY

The grade of the works of the previous course is not preserved. They must present the works, obligatorily and with the same requirements.

IMPORTANT NOTES

Students with special educational needs must contact the Academic Coordination Office of the (faculty/school) in advance to obtain the corresponding authorization for any adaptations (for example, extra time in exams). This authorization must then be sent by the student to the professor. It is recommended that this procedure be completed at the beginning of the semester.

ATTENTION: Please note that any attempt at fraud, cheating, plagiarism, or other irregular behavior constitutes a serious offense, as stipulated in Title IV, *Academic Disciplinary Rules for Students*, within the system of regulations on coexistence at the University of Navarra.

OFFICE HOURS

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Meetings by appointment (email).

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