



PRESENTACIÓN

Breve descripción:

This course provides the students with the necessary knowledge and skills to graphically reproduce an existing design and with the ability to translate ideas into sketches, preliminary outlines and technical documents of a particular design. The practical, physical, geometrical and drawing evidences are all approached with a clear thorough character and addressed as conditioning factors of the representation of reality.

The subject approaches the issue of the form through three main aspects: perception, representation and coding of the image, in its graphic components (visual and vector) and geometric components (analytical and metric).

It also covers introduction to fundamentals of:

- Freehand sketch and design theory with focus on rapid conceptual visualization.
- Graphic composition (symbols, images, and letterforms) with emphasis on observation, process, hierarchy and abstraction.
- Color theory, aesthetics, and systems with emphasis on the definition, replication, and interaction of color in design applications across various media.
- Drawing in the context of design studies. One, two, and three-point perspective for objects and environments as well as application of light and shadow.
- Photography used in the context of design studies. Familiarity with framing, perspective, light, shadow, color, texture, movement, figure and background, etc.

- **Titulación:** Degree in Design
- **Módulo/Materia:** Design techniques / Physical basics of design
- **Departamento:** Teoría, Proyectos, Urbanismo TPU (etsaunav)
- **ECTS:** 6 ECTS
- **Curso, semestre:** 1st semester, 1st year
- **Carácter:** BASIC
- **Profesorado:** Juan Roquette PhD Arch. (Prof. responsible for the subject), Elena Aparicio PhD Arch (Prof. - collaborator).
- **Alumnos internos:** Andy Rodríguez, Lex Iraizoz, Martín Murgui, Karime Jiménez.
- **Idioma:** English
- **Aula, Horario:** Classroom No. 3 (Wednesdays 9'30-11'00) Studio No.3 (Taller 3) (Wednesdays 11'00h-13'30h)

RESULTADOS DE APRENDIZAJE (Competencias)

BASIC COMPETENCIES



Universidad de Navarra

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.

BC4 – Students should be able to communicate information, ideas, problems and solutions to both a specialized and general audience.

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

GENERAL COMPETENCIES

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

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.

SC3 – Describe and apply the principles of general mechanics, static, mass geometry, and vector and tensorial fields to the study of design.

SC4 – Know and apply systems of spatial representation to design.

SC5 – Describe and apply analytical and differential geometry and algebraic methods to design.

PROGRAMA

MODULE 1. INTRODUCTION TO GRAPHICAL EXPRESSION

1.1.- Graphic procedures for the representation of concepts, spaces and design objects.

1.2.- The two dimensions and the three dimensions in the representation of objects.

1.3.- The rules of perception and representation.

1.4.- Levels of detail. Valuation of the line. Dimension.

1.5.- Flat metric: Euclide, Thales. Golden ratio. Theorem of the Height. Areas and volumes
Conics Tangents.

MODULE 2. THEORY OF THE FORM

2.1.- Laws of visual perception applied to the design.



2.2.- Conical perspective

2.3.- Evolution of the form.

2.4.- Composition.

2.5.- Photography: framing, focus, perspective, light, shadows, color, textures, movement, figure and background.

2.6.- Lettering. Anatomy of typography (Project 1)

2.7.- Theory of color. Thecniques. (Project 2)

2.8.- Parametrics: Describe and apply to the design the analytical and differential geometry and the algebraic methods.

MODULE 3. REPRESENTATION SYSTEMS

3.1.- The drawing as a descriptive tool: Plan, elevation and section.

3.2.- Dihedral and conical systems of representation: Fundamentals.

Point, Line, Plane. Intersections Parallelism and perpendicularity. Distances Abatements. Constructions and intersections of surfaces.

3.4.- Axonometric.

3.5. Measure. The sketch. Scale and proportions. (Project 3)

ACTIVIDADES FORMATIVAS

EDUCATIONAL ACTIVITIES HAVE BEEN DEVELOPED

AS PER THE FOLLOWING TABLE

ACTIVIDADES FORMATIVAS	HORAS	
AF01	Asistencia y participación en clases presenciales teóricas	30
AF02	Asistencia y participación en clases presenciales prácticas	30
AF03	Participación en seminarios	6
AF04	Realización de trabajos dirigidos	30



AF05	Participación en tutorías	2
AF06	Estudio y trabajo personal	52

EDUCATIONAL ACTIVITIES SPECIFIC BREAKDOWN

(Form and Image classes are marked in BLUE, on Wednesdays 9-13h).

N.B. (important): The information provided below correspond to the forecast of the year, with the schedule available at the beginning of the course. It may suffer adjustments if the coordination and the circumstances lead to a modification in time and manner. At any circumstances, Contents and Competences of the Program will be always covered.

N.B.: In any case, this table only ensures the reliability of the data corresponding to the activities and contents of the subject Form and Image. The rest of the activities of the Degree (other subjects or dates of reviews and joint projects) should always be consulted and checked against the official calendar/schedule provided by the Coordination of the first year, but not the table below.

EVALUACIÓN

CONVOCATORIA ORDINARIA

ASSESSMENT GUIDELINES / SISTEMA DE EVALUACIÓN

GRADING PROCEDURES HAVE BEEN IMPLEMENTED FOLLOWING THIS REFERENCE TABLE:

SISTEMA DE EVALUACIÓN	(ponderación, %)	
SE01	Control de la asistencia y participación en clases expositivas, prácticas y magistrales	20-40
SE02	Trabajos prácticos individuales y en equipo	30-60
SE03	Defensa oral de los trabajos	20-40
SE04	Exámenes (parciales y finales)	0-30

ASSESSMENT SPECIFIC BREAKDOWN



ORDINARY CALL (Thursday December 5th 2024) Continuous evaluation

50% Average of **EXERCISES / WEEKLY ASSIGNMENTS / WORKSHOP PRACTICES *** developed in the classes and/or homework

10% TESTS** of the semester (you are required to obtain 50/100 or more in the average of the tests to pass the subject)

40% FINAL EXAM***

TESTS T01, T02 & T03****

*Average grading of **EXERCISES / WEEKLY ASSIGNMENTS / WORKSHOP PRACTICES** must be higher than 50/100 to pass the subject.

***The **FINAL EXAM** results must be higher than 50/100 to pass the subject. It will be assessed over 10 points max. In order to take the final exam in the ordinary exam session, the student must have: a) More than 50/100 points on average in the exercises and workshops; and b) More than 50/100 points on average in the weekly assignments. In case of an average mark lower than 50/100, this will lead to a fail grade and the student will not be allowed to undertake the final exam (ordinary call).

****Students who get from 9 to 10 points (over 10) in a TEST will obtain 1,5 extra points to be added to the grading of final EXAM.

****Students who get from 8 to 8,9 points (over 10) in a TEST will obtain 1,4 extra points to be added to the grading of final EXAM.

****Students who get from 7 to 7,9 points (over 10) in a TEST will obtain 1,3 extra points to be added to the grading of final EXAM.

****Students who get from 6 to 6,9 points (over 10) in a TEST will obtain 1,2 extra points to be added to the grading of final EXAM.

****Students who get from 5 to 5,9 points (over 10) in a TEST will obtain 1 extra points to be added to the grading of final EXAM.

-The punctual submission of all the exercises developed during the semester is mandatory in time and form. Exercises not submitted on time won't be accepted and will be traduced as an absence/null.

-Attendance to over 80% of the classes. More than 20% unjustified absence —12 hours of class— will lead to an **ABSENT GRADE**. If the student misses a class due to health issues, it must be presented a medical certificate signed/sealed with official stamp.

-More than 20% of "NULL" exercises/assignments automatically lead to a failure in the ordinary grade of this subject.

-Those students who do not pass this subject in the ordinary call nor in the extraordinary call shall undertake the whole subject again the following year, with all the requirements to pass.

-Files must be delivered in the required format (via Google Drive Personal Folder) and must be named as specified as per Coordination Instructions. Non-compliance with the protocol to name files and upload them via Google Drive in time and form will mean an absence/null.

FINAL ASSESSMENT CODE



Universidad de Navarra

0,0 – 4,9 E-D / **FAIL** / SUSPENSO

5,0 – 6,9 C / **PASS** / APROBADO

7,0 – 8,9 B / **HIGH PASS** / NOTABLE

9,0 – 10,0 A / **DISTINCTION** or **DISTICTION WITH HONOUR** /

SOBRESALIENTE ó MATRÍCULA DE HONOR

CONVOCATORIA EXTRAORDINARIA

EXTRAORDINARY CALL

For all the students that have failed the subject in the 'Ordinary call' (Dec 2024) there will be a second chance to pass the subject during the extraordinary exam's period in June 2025.

Students who fail the extraordinary call of June 2025 but can enroll in the 2nd year of the degree in Design, will have to repeat completely this subject and will have to undertake every single test/exam/exercise/assignment as per Syllabus of the following academic year.

The student will have to develop an on-site practical exam in Studio 1 on the day of the extraordinary exam of 'form&image'.

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.

(Tal y como recoge la Normativa general de Evaluación de la Universidad de Navarra aprobada en mayo de 2019, "Los alumnos de grado que lo soliciten podrán ser evaluados en la convocatoria extraordinaria, aunque hayan superado la asignatura en ese curso. Para ello deberán solicitar ser incluidos en el acta al menos cinco días antes del comienzo del periodo de exámenes de esa convocatoria. La calificación final de la asignatura será la de la convocatoria extraordinaria, incluso aunque sea inferior que la obtenida con anterioridad"

Por lo tanto, la calificación obtenida en la convocatoria extraordinaria será la válida, independientemente de la obtenida en la convocatoria ordinaria, pudiendo incluso el alumno no superar la asignatura si suspende o no se presenta.)

HORARIOS DE ATENCIÓN

Prof. Juan Roquette PhD < jroquette@unav.es > (RA)

- Despacho: Office C1089. Edificio ETSAUNAV. Deapartamento TPU. Planta3^a / 3rd floor.
- Horario de tutoría: Thursdays 9'15-10'00am with prior notice to jroquette@unav.es



Universidad
de Navarra

BIBLIOGRAFÍA

[Kandinsky : 1923-1944; Catálogo de exposición; Fundación Juan March; Madrid, octubre-noviembre 1978. Localízalo en la Biblioteca](#)

AA.VV.; [Kandinsky : la disolución de la forma, 1900-1920](#). Fundació Caixa Catalunya, DL; Barcelona, 2003. [Localízalo en la Biblioteca](#)

[ACASO LÓPEZ-BOSCH, María](#); El lenguaje visual; Paidós, D.L.; Barcelona, 2006. [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [Art and visual perception : a psychology of the creative eye](#); University of California Press; Berkeley, 1966. (Spanish translation by Ed. Alianza. Madrid, 1984). [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [Visual thinking](#); University of California Press; Berkeley, 1969. Spanish translation 'El pensamiento visual'; Editorial Universitaria de Buenos Aires; Buenos Aires, 1976. [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [El poder del centro : estudio sobre la composición en las artes visuales](#); Alianza. Madrid, 1984. [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [Hacia una psicología del arte ; Arte y entropía : \(ensayo sobre el desorden y el orden\)](#); Alianza; Madrid, 1986. [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [Nuevos ensayos sobre psicología del arte](#); Alianza; Madrid, 1989. [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [Parables of sun light: observations on psychology, the arts, and the rest](#); University of California Press; Berkeley, 1989. [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [El cine como arte](#); Paidós; Barcelona, 1990. [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [Ensayos para rescatar el arte](#); Catedra; Madrid, 1992. [Localízalo en la Biblioteca](#)

ARNHEIM, Rudolf; [Consideraciones sobre la educación artística](#); Paidós; Barcelona, 1993. [Localízalo en la Biblioteca](#)

CASCIATO, Maristella et al.; Ed. Electa, Milan, HOLANDA 1870-1940, Kendra Schank Smith, Amsterdam [etc.], Elsevier, Architectural Press, 2005. [Localízalo en la Biblioteca](#)

THE MIES VAN DER ROHE ARCHIVE; New York [etc.]: Garland, 1992. [Localízalo en la Biblioteca](#)

DESIGN DRAWING / Francis D.K. Ching, New York [etc.]: Van Nostrand Reinhold, 1997. [Localízalo en la Biblioteca](#)

DIDI-HUBERMAN, Georges; Lo que vemos, lo que nos mira; Manantial; Buenos Aires, 2006. [Localízalo en la Biblioteca](#)

CHING, Francis D.K.; forma, espacio y orden; Gustavo Gili, México, 1982. [Localízalo en la Biblioteca](#)



Universidad de Navarra

- FARISH, W.; On isometrical perspective; en Transaction of the Cambridge Philosophical society; n. 1, 1822. pp. 1-22.
- GHYKA, Matila C.; La estética de las proporciones en la naturaleza y en las artes; Ed. Poseidon. Buenos Aires, 1953. [Localízalo en la Biblioteca](#)
- GOMBRICH, E. H.; La imagen y el ojo : nuevos estudios sobre la psicología de la representación pictórica; Alianza; Madrid, 1987. [Localízalo en la Biblioteca](#)
- GOMBRICH, E. H.; La imagen y el ojo : nuevos estudios sobre la psicología de la representación pictórica; Alianza; Madrid, 1987. [Localízalo en la Biblioteca](#)
- GOMBRICH, E. H.; Arte e Ilusión. Estudios sobre la psicología en la representación pictórica. Phaidon. London, 2008. [Localízalo en la Biblioteca](#)
- ITTEN, Johannes; [The art of color : the subjective experience and objective rationale of color](#); Reinhold; New York , 1973. [Localízalo en la Biblioteca](#)
- ITTEN, Johannes; [Design and form : the basic course at the Bauhaus](#); Thames and Hudson; London, 1965. [Localízalo en la Biblioteca](#)
- ITTEN, Johannes; The elements of color : a treatise on the color system of Johannes Itten, based on his book The art; John Wiley & Sons, cop.; New York, 1970. [Localízalo en la Biblioteca](#)
- KEPES, Gyorgy; [La situación actual de las artes visuales](#); Ediciones 3; Buenos Aires, 1963. [Localízalo en la Biblioteca](#)
- KEPES, Gyorgy; [Structure in art and in science](#); Studio Vista; London, 1965. [Localízalo en la Biblioteca](#)
- KEPES, Gyorgy; [Module, proportion, symétrie, rythme](#); La Connaissance; Bruxelles, 1968. [Localízalo en la Biblioteca](#)
- KEPES, Gyorgy; [Signe, image, symbole](#); La Connaissance; Bruxelles, 1968. [Localízalo en la Biblioteca](#)
- KEPES, Gyorgy; [Arts of environment](#); Aidan Ellis; S.I., 1972. [Localízalo en la Biblioteca](#)
- KEPES, Gyorgy; [El lenguaje de la visión](#); Infinito; Buenos Aires, 1976. [Localízalo en la Biblioteca](#)
- KANDINSKY, Wassily; [La gramática de la creación : El futuro de la pintura](#); Barcelona : [s.n.], 1987. [Localízalo en la Biblioteca](#)
- KANDINSKY, Wassily; [Cursos de la Bauhaus](#); Alianza; Madrid, 1991. [Localízalo en la Biblioteca](#)
- KANDINSKY, Wassily; [Kandinsky, complete writings on art](#); Da Capo Press; New York, 1994. [Localízalo en la Biblioteca](#)
- KANDINSKY, Wassily; De lo espiritual en el arte: contribución al análisis de los elementos pictóricos. Paidós, D. L.; Barcelona, 2010. [Localízalo en la Biblioteca](#)
- KANDINSKY, Wassily; [Punto y línea sobre el plano : contribución al análisis de los elementos pictóricos](#); Paidós, D.L.; Barcelona ; Buenos Aires ; México, 2012. [Localízalo en la Biblioteca](#)



Universidad de Navarra

KLEE, Paul; [The diaries of Paul Klee, 1898-1918](#); University of California Press; Berkeley, 1984. [Localízalo en la Biblioteca](#)

KLEE, Paul; [On modern art](#); Faber and Faber; London, 1966. [Localízalo en la Biblioteca](#)

KLEE, Paul; [Pedagogical sketchbook](#); Praeger; New York, 1969. [Localízalo en la Biblioteca](#)

KLEE, Paul; [Teoría del arte moderno](#); Cactus; Buenos Aires, 2007. [Localízalo en la Biblioteca](#)

OTTO, Frei; Form and structure; Granada Publishing; Londres, 1976. [Localízalo en la Biblioteca](#)

PACCIOLI, Luca; La divina proporción; Ed. Akal; Madrid, 1987. [Localízalo en la Biblioteca](#)

PARTSCH, Susanna; [Paul Klee : 1879-1940](#); Taschen; Köln, 2003. [Localízalo en la Biblioteca](#)

PEDOE, Dan; La geometría en el arte; Ed. Gustavo Gili; Barcelona, 1979. [Localízalo en la Biblioteca](#)

ROBERTSON Scott; BERTLING, Thomas; How to draw. Design Studio Press. Culver City, CA (USA), 2013. [Localízalo en la Biblioteca](#)

SOLER SANZ, Felipe; Perspectivas curvilíneas; Departamento de EGA; Universidad Politécnica de Valencia. Valencia, 1988.

VAGNETTI, Luigi; Il linguaggio grafico dell'architetto, oggi; Vitali e Ghianda Editrice. Génova, 1965. [Localízalo en la Biblioteca](#)

WINGLER, Hans M.; [The Bauhaus, Weimar, Dessau, Berlin, Chicago, 1919-1944](#); Gustavo Gili; Barcelona, 1980. [Localízalo en la Biblioteca](#)

ZUNZUNEGUI, Santos; Paisajes de la forma : ejercicios de análisis de la imagen; Cátedra; Madrid, 1994. [Localízalo en la Biblioteca](#)

Experimenta: <https://www.experimenta.es/noticias/grafica-y-comunicacion/cinco-documentales-de-diseno-imprescindibles/> quizás se puedan aportar como "bibliografía" complementaria al curso.

Design and Thinking: https://www.youtube.com/watch?v=Z_YwyMssN0Y

The modern Russian design: https://www.youtube.com/watch?v=1GkOPUh3J_I

Form and function: <http://www.rtve.es/alcarta/videos/el-documental/documental-funcion-forma-diseno-espana-medio-siglo-contigo/3797778/>

Design Disruptors: <https://www.designdisruptors.com/>

Design is future: <https://www.youtube.com/watch?v=zodT9bCdIiI>