

Year 2024-25



Istituto Europeo di Design

Private Licensed Centre

TEACHING GUIDE FOR
Representation Systems

Foundation Course – IED Madrid Diploma Programme

Total Design

Updated on: 1st September 2024

Foundation Course – IED Madrid Diploma Programme

Subject: Representation Systems.

1. SUBJECT/COURSE IDENTIFIERS

Type	Basic training
Nature	Theoretical-practical course
Specialty/itinerary/style/tool	Total Design
Subject/Field	Languages and techniques for representation and communication
Course period	1 st Semester
Number of credits	4 ECTS
Department	Didactic/Educational department
Priority/ prerequisites	Without priority
Language/s in which the course is taught	English

2. TEACHER IN CHARGE OF THE SUBJECT

Surname & Name	E-mail
Sánchez Jiménez, Javier	

3. LIST OF LECTURERS AND GROUPS THEY TEACH

Surname & Name	E-mail	Groups

4. COMPETENCIES/SKILLS

Cross-sectoral skills
CT8 Developing reasoned and critical ideas and arguments.
CT13 Pursuit of excellence and quality in their professional activity.
CT14 Mastering research methodology in the generation/creation of projects, ideas and viable solutions.
CT15 Working autonomously and knowing how to value the importance of initiative and entrepreneurship in professional practice.

General skills

CG2 Mastering the languages and expressive resources of representation and communication.

CG4 Having a scientific vision of the perception and behaviours of form, matter, space, movement, and colour

CG11 Communicating ideas and projects to clients, arguing critically, knowing how to evaluate proposals and channelling dialogue.

CG18 Optimizing the use of the resources needed to achieve the planned objectives.

CG20 Understanding the behaviour of the elements involved in the communicative process, mastering the technological resources in communication, and assessing their influence on design processes and products.

Specific skills

CFB5 Applying verification methods for efficient communication.

5. LEARNING ACHIEVEMENTS

- Acquiring the observational skills needed to understand the environment surrounding the designer.
- Knowing how to handle technical graphic language and its communicative dimension.
- Knowing how to apply the basics of flat geometry and solve elementary geometric operations.
- Knowing how to apply the fundamentals of three-dimensional geometry in the dihedral, axonometric and conic systems.
- Knowing how to distinguish and analyse the different views of an object: floor, elevation and section.
- Knowing how to identify and handle the different types of perspectives.

6. CONTENTS

Section (if applicable)	Topic/repertoire
I. ELEMENTS OF DESIGN	Topic 1. Line, form, volume, texture, space
	Topic 2. Colour
	Topic 3. Typography

II. FLAT GEOMETRY	Topic 4. Introduction to Geometry
	Topic 5. Flat Geometry
III. THREE-DIMENSIONAL GEOMETRY	Topic 6. Dihedral system
	Topic 7. Axonometric system
	Topic 8. Conic system
IV. TECHNICAL GRAPHIC LANGUAGE AND ITS COMMUNICATIVE DIMENSION IN THE FIELD OF DESIGN	Topic 9. Introduction. Supports, materials & formats
	Topic 10. Image. Photography & illustration
	Topic 11. Composition online/offline design

7. STUDENTS WORK TIME PLAN/SCHEDULE

Type of Activity	Total hours
Theoretical activities	15,5 hours
Practical activities	15,5 hours
Other mandatory training activities (conferences, seminars, etc.)	32 hours
Tests	9 hours
Student's working hours	38 hours
Internship/work placement preparation	10 hours
Student's total working hours	120 hours

8. METHODOLOGY

Theoretical activities	Lectures where the teacher will introduce the theoretical concepts and their analysis, supported by documentaries, audiovisuals and other necessary ICTs. During the lecture, the student will be able to ask questions to solve any doubts that may arise.
Practical activities	Weekly session will include activities that encourage students' personal reflection on their work, as well as reaching conclusions regarding what has been learnt. And all along, favouring functional learning which will enable students to put the knowledge into practice. Project tutorials will be conducted according to the needs of the project.
Other mandatory training activities (conferences, seminars, etc.)	The teacher will encourage visiting different exhibitions, readings and viewing of documentaries. Attendance to the support workshop for the theoretical-practical classes. These sessions will serve as a tutorial practice of the contents taught during class. In them, students will be able to ask questions and carry out the set exercises and projects with specialized teachers.

9. EVALUATION AND GRADING CRITERIA AND INSTRUMENTS

Work to be assessed:

1. Acquiring the observational skills needed to understand the environment surrounding designers.
2. Being able to handle the technical graphic language and its communicative dimension.
3. Being able to apply the basics of flat geometry and solve elementary geometric operations.
4. Acquiring the ability to apply the principles of three-dimensional geometry in the dihedral, axonometric and conic systems.
5. Knowing how to distinguish and analyse the different views of an object: floor, elevation and section.
6. Knowing how to identify and handle the different types of perspectives.

The evaluation assessment must be designed and planned in a manner that integrates it within the teaching/learning training activities.

The assessment of students learning ought to be continuous, personalized and integrative:

- Continuous: in that it is integrated into the teaching-learning process and consequently is not limited by dates or specific situations.
- Personalised: since it must take into account the capacities, skills and the student's attitude. Special attention will be paid to the student's participation in work groups.
- Integrative: in that it requires taking into account the general capacities established for each stage, this will be done through the objectives in the different units and areas.

Students' learning will be assessed in relation to the achievement of the educational objectives that are specified in the course syllabus, and associated to the general and specific objectives, taking as an immediate reference the evaluation criteria established for each learning area.

To assess students learning process we need to:

- Evaluate their curricular competence (abilities and aptitudes).
- Assess the factors that hinder or facilitate good learning.
- Encourage self-evaluation and co-evaluation of students amongst themselves, as a source of critical analysis of their results, to allow for changes in attitude and for their improvement.
- Value the learning context in which the student develops.

9.1. EVALUATION/ASSESSMENT TOOLS

Theoretical activities	Actitud activa en el aula compartiendo reflexiones y experiencias. Tutorías obligatorias para el seguimiento de los ejercicios
Practical activities	Se solicitarán los ejercicios prácticos basados en los conceptos teóricos desarrollados en clase. Tutorías obligatorias para el seguimiento del proyecto. Realización y presentación del proyecto final.
Other mandatory learning activities (lectures, seminars, etc.)	Active participation in workshops, lectures, exhibitions, conferences or webinars, always sharing points of view and knowledge with the groups in the classroom.

9.2. EVALUATION CRITERIA

Theoretical activities	Active attention and understanding during explanations. Showing initiative to contribute with your own opinions and constructive criticism. Punctuality and quality throughout the research process, in the follow-up of the exercises during tutorials.
Practical activities	The assessment of the practical cases will deal with: <ul style="list-style-type: none"> • Coherent practical development of the theoretical contents. • Adequate use of the technique and own tools. • Correct presentation. • Punctuality: handing-in projects on time. <p>The continuous follow-up of projects will be conducted in tutorials.</p>
Other mandatory learning activities (lectures, seminars, etc.)	We shall value that the student applies the knowledge acquired in workshops, seminars, expositions, conferences or webinars, to the work and projects of the course.

9.3. GRADING CRITERIA

1. The evaluation system to be used in the subject/course is adapted to the continuous evaluation model.

2. In the continuous evaluation system, class attendance is compulsory, and students must comply with a percentage of activity in the presence of the teacher, which is estimated to be 80%.
3. If the student does not meet the criteria for continuous evaluation, they will be graded in a evaluation process with a loss of continuous evaluation - they will present the projects requested during the course and a specific test for this call, and, their corresponding relative weights are shown in section 9.3.1 and 9.3.2 of this guide.
4. In any case, the student will take an extraordinary exam, the structure, evaluation instrument and grading criteria for said exam is explained in section 9.3.3 of this guide.
5. In order to pass the subject/course, the student must meet the requirements of the weighting of the evaluation instruments defined in points 9.3.1, 9.3.2 and 9.3.3.3.

9.3.1. Assessment tools for the weighting of grades in the continuous assessment process

Tools	Weighting of grades
Weekly practical exercises	60%
Presentation & development of final project	30%
Critical and well-argued participation in debates, tutorials and workshops	10%
Total	100%

9.3.2. Assessment tools for the weighting of grades in the evaluation process following a loss of continuous assessment/evaluation

Tools	Weighting of grades
Drafting and presentation of the exercises and final project.	60%
Presentation of the specific test for the evaluation in case of a loss of continuous evaluation.	40%
Total	100%

9.3.3. Assessment tools for the weighting of grades in the extraordinary evaluation process.

Tools	Weighting of grades
Presentation of practical exercises and Final Project	60%
Presentation of the specific test for the extraordinary evaluation	40%
Total	100%

9.3.4. Weighting of grades in the evaluation process for students with a disability

When the evaluation tools are adapted for this purpose, all the different types of disability must be taken into account.

Tools	Weighting of grades
These shall be determined taking different types of disability into consideration	
Total	100%

10. TIME PLANNING OF THE CONTENTS, TEACHING METHODOLOGY AND EVALUATIONS

Session	CONTENTS, CONNECTED TEACHING METHODOLOGY, AND EVALUATION TOOLS		Total hours presence-based	Total hours not presence-based
Session 1	Introduction to the subject			
	Theoretical activities	Master class, which will develop the specific topic of the section (Methodology & subject contents).	2,5 hours	

Session 2	TOPICS 1-3: Line, form, volume, colour & typography			
	Theoretical activities	Master class developing the specific topic of the section. The teacher will display documents and images and will analyse them using the necessary ICTs.	1 hour	
	Practical activities	Producing a case-study. Students must put into practice the concepts and knowledge acquired through a series of set exercises.	1 hour	
	Other learning activities	Attendance to the workshop.		3 hours
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up and revision of the case-study.	0,5 hours	

Session 3	TOPICS 4-5: Introduction to Geometry & flat Geometry			
	Theoretical activities	Master class developing the specific topic of the section. The teacher will display documents and images and will analyse them using the necessary ICTs.	1 hour	
Practical activities	Producing a case-study. Students must put into practice the concepts and knowledge acquired through a series of set exercises.	1 hour		

	Other learning activities	Attendance to the workshop.		3 hours
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up and revision of the case-study proposed in the last session.	0,5 hours	

	TOPIC 6: Dihedral System			
Session 4 - 6	Theoretical activities	Master class developing the specific topic of the section. The teacher will display documents and images and will analyse them using the necessary ICTs.	3 hours	
	Practical activities	Practical class. Students must put into practice the concepts and knowledge acquired through a series of set exercises.	3 hours	
	Other learning activities	Attendance to the workshop.		8 hours
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up and revision of the case-study proposed in the last session.	1.5 hours	

	TOPIC 7: Axonometric System			
Session 7 - 9	Theoretical activities	Master class developing the specific topic of the section. The teacher will display documents and images and will analyse them using the necessary ICTs	3 hours	
	Practical activities	Practical class. Students must put into practice the concepts and knowledge acquired through a series of set exercises.	3 hours	
	Other learning activities	Attendance to the workshop.		6 hours
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up and revision of the case-study proposed in the last session.	1.5 hours	

	TOPIC 8: Conic System			
Session 10 - 12	Theoretical activities	Master class developing the specific topic of the section. The teacher will display documents and images and will analyse them using the necessary ICTs.	3 hours	
	Practical activities	Practical class. Students must put into practice the concepts and knowledge acquired through a series of set exercises.	3 hours	

	Other learning activities	Attendance to the workshop.		6 hours
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up and revision of the case-study proposed in the last session.	1.5 hours	

	TOPIC 9: Introduction, supports, materials & formats			
Session 13	Theoretical activities	Master class developing the specific topic of the section. The teacher will display documents and images and will analyse them using the necessary ICTs.	1 hour	
	Practical activities	Drawing-up a practical case-study. Students must put into practice the concepts and knowledge acquired through a series of set exercises.	1 hour	
	Other learning activities	Attendance to the workshop.		3 hours
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up and revision of the case-study proposed in the last session.	0,5 hours	

	TOPICS 10 & 11: Image. Photography and illustration and Composition design online / offline			
Session 14	Theoretical activities	Master class developing the specific topic of the section. The teacher will display documents and images and will analyse them using the necessary ICTs.	1 hour	
	Practical activities	Drawing-up a practical case-study. Students must put into practice the concepts and knowledge acquired through a series of set exercises.	1 hour	
	Other learning activities	Attendance to the workshop.		3 hours
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up and revision of the case-study proposed in the last session.	0,5 hours	

	Presentation of Final Project. Evaluation: Ordinary Call			
Session 15	Practical activities	Continuous Evaluation: Project & result evaluation Evaluation following a loss of continuous evaluation/assessment: the evaluation will be based on projects and results, as well as the specific test.	2,5 hours	

Session 16	Proyecto entrega		
	Evaluation	Evaluation, comments & information on the Project and exercise results.	2.5 hours

11. TEACHING RESOURCES AND MATERIALS

11.1. General Bibliography

Title	Dibujo y construcción de la realidad: arquitectura, proyecto, diseño, ingeniería, dibujo
Author	Cabezas, Lino
Publisher	Cátedra

Title	Dibujo Técnico I
Author	Calavera, César; Jiménez, Isabel
Publisher	S.A. Ediciones Paraninfo

Title	Dibujo y Proyecto (English edition title: Design Drawing)
Author	Ching, Francis D. K.
Editorial	Gustavo Gili

Title	Diseñar hoy, temas contemporáneos de diseño gráfico
Author	Pelta, Raquel
Publisher	Paidós Ibérica

Title	Dibujo para diseñadores industriales
Author	Julián, Fernando; Albarracín, Jesús
Publisher	Parramón, 2005

Title	Dibujo Técnico
Author	Gutiérrez Vázquez, Ángel
Publisher	Grupo Anaya, 1998

Title	Dibujo industrial
Author	Félez, Jesús; Martínez, M ^ª Luisa
Publisher	Síntesis, 1996

Title	El dibujo técnico de moda paso a paso (English edition title: TECHNICAL DRAWING FOR FASHION).
Author	Szcutnicka, Basia
Publisher	Gustavo Gili, 2010

Title	Curso de dibujo geométrico y de croquización
Author	Rodríguez de Abajo, F. Javier
Publisher	Editorial Donostiarra, 1997

Title	Ilustración de moda. Dibujo plano
Author	Maomao
Publisher	Maomao, 2007

Title	La geometría del diseño (English edition title: Geometry of Design)
Author	Elam, Kimberly
Publisher	Gustavo Gili, 2014

11.2. Additional Bibliography

Title	Veintidós consejos sobre tipografía (que algunos diseñadores jamás revelarán)
Author	Jardí, Enric
Publisher	Actar

Title	Manual del dibujo arquitectónico (English edition title: Architectural Graphics)
Author	Ching, Francis D. K.
Publisher	Gustavo Gili, Barcelona

Title	Color, espacio y estilo (English edition title: Colour, Space, and Style: All the Details Interior Designers Need to Know but Can Never Find)
Author	AAVV
Publisher	Gustavo Gili, Barcelona

Title	Dibujo para joyeros
Author	Forcadell Berenguer, María Josep ; Asunción Pastor, Josep
Publisher	Parramón, 2006

Title	Diseño Digital de Moda
Author	Anna María López López
Publisher	Anaya Multimedia

11.3. Websites of interest

www.dibujotecnico.com

www.logodesignlove.com

designspiration.net

www.itsnicethat.com

ffffound.com

www.printeresting.org

www.domestika.org

www.unostiposduros.com

www.andreubalius.com

11.4. Other materials & learning resources

Paper, pencils, rulers, drawing compass and other basic tools of technical drawing.