Year 2024-25

IED Madrid

Istituto Europeo di Design
Private Licensed Centre

TEACHING GUIDE FOR

Colour

Curso Foundation Course – IED Madrid Diploma Programme

Total Design

Updated on: 1st September 2024

Foundation Course – IED Madrid Diploma Programme.
Subject: Colour.

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
Teaching/course period	1st 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
Ranz Torrejón, Óscar	

3. LIST OF LECTURERS AND GROUPS THEY TEACH

Surname & Name	E-Mail	Groups

4. COMPETENCIES/SKILLS

Cross-sectoral skills
CT1 Organise and plan the work in an efficient and motivating way.
CT2 Collecting meaningful information, analysing, synthesising and managing it accordingly.
CT4 Efficient use of information and communication technologies.
CT7 Knowing how to use communication skills and constructive criticism in teamwork.
CT8 Developing reasoned and critical ideas and arguments.

CT14 Mastering research methodology in the generation/creation of projects, ideas and viable solutions.
CT17 Through their professional activity they shall raise social awareness towards the importance of cultural heritage, its impact in different areas and its capacity to generate significant values.

General skills
CG2 Mastering the languages and expressive resources of representation and communication.
CG3 Establishing relationships between formal language, symbolic language and specific functionality.
CG4 Having a scientific vision of the perception and behaviours of form, matter, space, movement, and colour.
CG6 Disseminating knowledge of the historical, ethical, social and cultural aspects of design.
CG7 Organising, leading and/or coordinating work teams, and knowing how to adapt to multidisciplinary teams.
CG10 Adapting to changes and to the industrial technological evolution.
CG19 Showing critical capacity and knowing how to propose research strategies.
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.

5. LEARNING ACHIEVEMENTS

- Knowing how to skilfully use the vocabulary necessary to describe colour and its contextualization in the history of art and design.
- Knowing how to distinguish the phenomena of colour in its physical, physiological, communicative and compositional spheres.
- Knowing how to handle the composition of basic subtractive and additive mixtures.
- Knowing how to identify the emotions associated with colour.
- Knowing how to use the possibilities offered by chromatic valuation in different design projects, by applying verified criteria on the value of different chromatic ranges.
- Acquiring/Learning the ability to analyse colour in other cultures.
- Knowing how to apply colour making the most of chromatic resources and international dimensions and standards, in different design disciplines.
- Knowing how to use the different tools and updated resources for the use of colour in design and knowing how to handle - both manually and digitally - the different means available when applying colour to the design process. .

6. CONTENTS

Section (if applicable)	Topic/repertoire
I. THEORETICAL FOUNDATIONS OF COLOUR	**Topic 1. Essential concepts** 1.1. Introduction 1.2. Colour Physics 1.3. Colour schemes
	Topic 2. Theoretical notions of colour 2.1. Hue, Saturation, Brightness 2.2. Scales
	Topic 3: History of colour theory 3.1. Colour theorists 3.2 Colour theories and their practical application

II. COLOUR PERCEPTION	**Topic 4: Physical assessment of colour** 4.1. The mechanism of vision 4.2 Colorimetry 4.3. Problems in colour perception
	Topic 5: The importance of colour as an element of expression 5.1. Colour as an expressive element 5.2. Denotative colour 5.3. Connotative colour 5.4. Iconic, saturated, imaginative colour 5.5. Colour and rhetoric

III. MODELS AND STANDARDISATION OF COLOUR	**Topic 6: Numerical systems** 6.1. CIE system 6.2. Colour models in digital technology
	Topic 7: Pantone and other standardisations
	Topic 8: Online resources for the use of colour 8.1 Websites 8.2 Apps 8.3 Spectrometers

IV. COLOUR PSYCHOLOGY	**Topic 9: Colour and sensation** 9.1 Perception and psychology of colour 9.2 The sociology of colour 9.3 Stroop effect 9.4 Synaesthesia
	Topic 10: Colour as a cultural code 10.1 Colour in rituals 10.2 Colour in in social relations and festive events 10.3 Colour in the context of political, religious, sporting events, etc…

V. COLOUR IN DESIGN	**Topic 11: Colour in clothing/Fashion design** Chromatic factors in fashion design
	Topic 12: Colour and product design 12.1. Materials, textures and colour 12.2. Qualities, gloss, surfaces
	Topic 13: Colour in interior design 13.1 Colours and moods/ Lighting 13.2 Chromatic strategies 13.3 Colour and spatial effects
	Topic 14: Colour in Graphic Design and visual communication 14.1 Typography and colour 14.2 Legibility 14.3 Visibility 14.4 Colour and signage 14.5 Colour and corporate identity

7. STUDENTS WORK TIME PLAN/SCHEDULE

Type of Activity	Total hours
Theoretical-practical activities	37,5 hours
Practical activities	8 hours
Other mandatory training activities (conferences, seminars, etc.)	24 hours
Tests	2,5 hours
Student's working hours	38 hours
Theoretical-practical preparation	10 hours
Student's total working hours	**120 hours**

8. METHODOLOGY

Theoretical-practical activities	The 1st part of the session will include 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. In the 2nd half of the session debate topics will be brought forward and students will be expected to take an active role in the debate.
Practical activities	Sessions will include practical exercises 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.
Other mandatory training activities (conferences, seminars, etc.)	The teacher will propose visits to different exhibitions or seminars. Students will be supported by the digital tools workshop, modelling, Fab Lab and laboratories for the completion of projects and exercises with the support of specialized teachers. Support sessions for practical classes in which - through a participation method based on self-evaluation and debate - students can solve doubts and make progress in their project and exercises with the help of a guidance tutor.

9. EVALUATION AND GRADING CRITERIA AND INSTRUMENTS

Work to be assessed:

1. Knowing how to skilfully use the vocabulary needed to describe colour and its contextualization in history of art and design.
2. Knowing how to distinguish the phenomena of colour in its physical, physiological, communicative and compositional spheres.
3. Knowing how to handle the composition of basic subtractive and additive mixtures.
4. Knowing how to identify the emotions associated with colour.
5. Knowing how to use the possibilities offered by chromatic evaluation in different design projects, applying contrasted criteria based on the value of the different chromatic ranges.
6. Learning the ability to analyse colour in other cultures.
7. Knowing how to apply colour taking advantage of chromatic resources and international dimensions and standards in different design disciplines.
8. Knowing how to use the different tools and updated resources for the use of colour in design, as well as handling the different means of colour application, both manually and digitally, in the design process.

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-practical activities	Students will be expected to have an active role in the classroom, sharing thoughts and experiences. Research work: a task based on the research and analysis of colour applied to different areas of today's world will be set. Mandatory tutorials as a follow-up to exercises.
Practical activities	Practical exercises will be requested, these shall be based on the perception and experimentation of colours and their combinations.Thus, we shall work on specific techniques related to the implementation and the study of colour. A weekly or fortnightly monitoring of the exercise will be carried out in the classroom (see schedule).
Other mandatory training activities (conferences, 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-practical activities	Active attention and understanding during explanations. Showing initiative to contribute with your own opinions and constructive criticism. Follow-up and presentation of research projects. To be assessed: • Development of the theoretical contents set in the task • Use of the plastic elements proposed for each task • Adequate use of the technique and tools • Tidy work and correct presentation • Punctuality handing-in tasks/work.
Practical activities	The assessment of practical tasks (follow-up & handing-in) will be based on: • The correct use of the language of colour in the presentation • The ability to express oneself verbally • Using a good audiovisual support
Other mandatory training activities (conferences, 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 an 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
Presentation of compulsory practical exercises	40%
Development and follow-up of research project	50%
Critical and well-argued participation in debates, tutorials and workshop	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
Presentation of the exercises and research 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	**TOPIC 1: Fundamental Concepts**			
	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Introduction & Physics of colour) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 horas	
	Evaluation	Proactive attitude in the classroom.		

	TOPIC 2: Theoretical notions on Colour			
Session 2	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Characteristics of colour) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Introduction to practical tasks.		2 hours
	Other learning activities	Going to museums or exhibition.	4 hours	
	Evaluation	Proactive attitude in the classroom.		

	TOPIC 3: History of the Theory of Colour			
Session 3	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour theories and theorists) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Creating a case-study. Developing the research task.	2 hours	
	Evaluation	Proactive attitude in the classroom.		

	TOPIC 4: Physical evaluation of Colour			
Session 4	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Vision and colorimetry) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs. Developing the research task.	2,5 hours	
	Evaluation	Proactive attitude in the classroom. Follow-up of case-study.		

	TOPIC 5: Importance of colour as an element of expression			
Session 5	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour and rhetoric) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Other learning activities	Going to a previously arranged exhibition or seminar.	4 hours	
	Evaluation	Proactive attitude in the classroom. Follow-up of research task development.		

	TOPIC 6: Numerical systems			
Session 6	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour systems) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Creating a case-study.	2 hours	
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the exhibition or seminar.		

	TOPIC 7: Pantone & other normalizations			
Session 7	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour and rhetoric) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs. Developing the research task.	2,5 hours	
	Practical activities	Creating a case-study.		1 hour
	Other learning activities	Going to a previously arranged exhibition or seminar.	4 hours	
	Evaluation	Proactive attitude in the classroom. Follow-up of case-study development.		

	TOPIC 8: Online resources for the use of Colour			
Session 8	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour and digital technology) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs. Developing the research task.	2,5 hours	
	Practical activities	Creating a case-study.		1 hour
	Other learning activities	Going to a previously arranged exhibition.	4 hours	
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the exhibition or seminar. Follow-up of the research task.		

	TOPIC 9: Colour & sensations			
Session 9	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Perception, psychology and sociology of colour) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Developing practical case-study.		1 hour
	Other learning activities	Going to a previously arranged exhibition.	4 hours	
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the Museum or exhibition. Follow-up of the practical case-study.		

	TOPIC 10: Colour as a cultural code			
Session 10	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour and culture) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Developing practical case-study.	2 hours	
	Evaluation	Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the Museum or exhibition. Follow-up of the practical case-study.		

	TOPIC 11: Colour in clothing garments			
Session 11	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour in fashion design) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Developing practical case-study.		1 hour
	Evaluation	Proactive attitude in the classroom. Follow-up of the practical case-study.		

	TOPIC 12: Colour in clothing garments			
Session 12	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour in product design) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Developing practical case-study.		2 hours
	Evaluation	Proactive attitude in the classroom, sharing knowledge. Follow-up of the research task.		

	TOPIC 13: Colour in Interior Design			
Session 13	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour in interior design) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Developing practical case-study.	2 hours	
	Evaluation	Proactive attitude in the classroom. Follow-up of the practical case-study.		

Session 14	**TOPIC 14: Colour in graphic design and visual communication**			
	Theoretical-practical activities	Master class, which will develop the specific topic of the section (Colour and graphic design) both from a historical point of view, and from a current practical perspective. The teacher will display documents and images and will analyse them using the necessary ICTs.	2,5 hours	
	Practical activities	Developing practical case-study.		2 hours
	Other learning activities	Going to a previously arranged exhibition.	4 hours	
	Evaluation	Proactive attitude in the classroom. Follow-up of the practical case-study.		

Session 15	**TOPIC 15: Evaluation**			
	Evaluation	• **Continuous Evaluation:** Assessment of projects & results. • **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	**TOPIC 16: Comments on the Final Results**			
	Theoretical-practical activities	Evaluation, comments & information on the Project and exercise results.	2,5 hours	

11. TEACHING RESOURCES AND MATERIALS

11.1. General Bibliography

Title	El color: historia, teoría y aplicaciones
Author	Moreno Rivero, Teresa
Publisher	Editorial Ariel S.A., Barcelona, 1996

Title	Psicología del color (English title: "Psychology of colour")
Author	Heller, Eva
Publisher	Editorial Gustavo Gili S.A., Barcelona, 2004

Title	La interacción del color (English title: "Interaction of Color" 1963)
Author	Albers, J.
Publisher	Alianza Forma

Title	Teoría de los colores (English title: "Theory of colours")
Author	Goethe, J. W.
Publisher	Aguilar

Title	Breve historia de los colores (Original French title: "Le petit livre des couleurs")
Author	Pastoureau, M
Publisher	Paidós

Title	Arte y percepción visual (English title: "Art and visual perception")
Author	Arheim R.
Publisher	Alianza Forma

11.2. Additional Bibliography

Title	Principios del diseño en color (English edition: "Principles of color design")
Author	Wong, Wucius
Publisher	Gustavo Gili S.A., Barcelona, 1998

Title	El color en el diseño gráfico (English edition: "Graphic Design School")
Author	Swann, Alan
Publisher	Gustavo Gili S.A., Barcelona, 1993

Title	Historia de los colores (English edition: "History of Colours")
Author	Brusatin, M.
Publisher	Paidós

Title	El gran libro del color (English & German edition: "The Forms of Color")
Author	Gerstner
Publisher	Blume

11.3. Websites of interest

http://www.sfgirlbybay.com
http://www.uppercasemagazine.com
http://www.typogabor.com
http://www.curvedwhite.com
https://www.analogsigns.com

11.4. Other learning materials and resources

www.seedslondon.com
www.experimenta.es
@thetypehunterco
@reservedmagazine
@thenewworkproject
@peclersparis
@visualgraphc
@therealfranklyn
@packaging_of_the_world