

Year 2024-25



Istituto Europeo di Design

Private Licensed Centre

TEACHING GUIDE FOR
Digital Technology

Foundation Course – IED Madrid Diploma Programme

Total Design

Updated on: 1st September 2024

Foundation Course – IED Madrid Diploma Programme.
Subject: Digital Technology.

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 | 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 |
|-------------------------------------|--------|
| Calderón Jiménez, Lorenzo Alexander | |

3. LIST OF LECTURERS AND GROUPS THEY TEACH

| Surname & Name | E-mail | Groups |
|----------------|--------|--------|
| | | |

4. COMPETENCIES/SKILLS

| Cross-sectoral skills |
|---|
| CT4 Efficient use of information and communication technologies. |
| CT9 Integrate well into multidisciplinary teams and in diverse cultural contexts. |
| CT13 Pursuit of excellence and quality in their professional activity. |
| CT14 Mastering research methodology in the generation/creation of projects, ideas and viable solutions. |

General skills

CG1 Conceiving, planning and developing design projects according to technical, functional, aesthetic and communicative requirements and conditions.

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

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.

CG21 Mastering research methods.

5. LEARNING ACHIEVEMENTS

- Students will be able to apply the basic theoretical and technical knowledge comprised in digital technology.
- Students will acquire the ability, autonomy and dexterity to use the digital tools included in the programme: Adobe Photoshop, Adobe Illustrator and Adobe InDesign.
- Knowing how to identify and apply graphic strategies using digital technologies.
- Knowing how to handle and understand the concept of the image within the printed and digital world.
- Knowing how to distinguish and analyse different digital formats.
- Knowing how to manage the knowledge acquired about information control and communication.
- Being able to apply critical thinking to make the choices on how to choose the necessary tools and methods to approach and carry out different graphic projects, both in printed and digital formats.

6. CONTENTS

| Section (if applicable) | Topic/repertoire |
|---|--|
| I.- CREATIVITY IN DIGITAL ENVIRONMENTS. WORKING ON PC/MAC | Topic 1. Introduction to work on PC/MAC 1.1. Knowledge of Mac. 1.2. Knowledge of Windows. |
| | Topic 2. Saving files on the server 2.1. Working guidelines and delivery formats. 2.2. Backups. |

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|---|---|
| | <p>Topic 3. Introduction to digital images</p> <p>3.1. Vectors and Pixels. 3.2. Raster and vector. 3.3. Resolution. 3.4. Digital colour.</p> |
| <p>II. BITMAP – PIXMAP – IMAGE POSTPRODUCTION – ADOBE PHOTOSHOP</p> | <p>Topic 4. Introduction to the Photoshop interface</p> <p>4.1 Image size and resolution 4.2 Move, selection and transformation tools. 4.3 Introduction to Photoshop layers.</p> |
| | <p>Topic 5. Working with layers</p> <p>5.1 Transforming layers. 5.2 Merging layers. 5.3 Adjustment layers and other layers.</p> |
| | <p>Topic 6. Brush and eraser tool</p> <p>6.1 Creating brushes. 6.2 Retouching tools. 6.3 Presentation unifying exercise.</p> |
| | <p>Topic 7. Text tools</p> <p>7.1 Text editing and formatting. 7.2 Placing of elements.</p> |
| | <p>Topic 8. Layer masks</p> <p>8.1 Painting masks. 8.2 Quick masks.</p> |
| | <p>Topic 9. Adjustment layers applied in photomontage</p> |
| <p>III. MIXED VECTOR AND EDITING – DESIGN – ADOBE ILLUSTRATOR – INTRODUCTION TO ADOBE INDESIGN</p> | <p>Topic 10. Adobe Illustrator Interface</p> <p>10.1. Menus. 10.2. Windows. 10.3. Tool panel. 10.4. Customization of the workspace. 10.5. Programme preferences.</p> |
| | <p>Topic 11. Using layers</p> <p>11.1. The Layer Panel. 11.2. Sublayers. 11.3. Isolation mode. 11.4. Layers template. 11.5. Export layers.</p> |

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|--|--|
| | <p>Topic 12. Selection tools 12.1. Selection & types.</p> |
| | <p>Topic 13. Drawing tools 13.1. Basic objects. 13.2. Pen/Fountain Pen. 13.3. Brushes. 13.4. Pencil. 13.5. Eraser.</p> |
| | <p>Topic 14. Colour 14.1. Creating, modifying and deleting samples. 14.2. Types of samples. 14.3. Sample libraries. 14.4. Document colour mode.</p> |
| | <p>Topic 15. Output 15.1. Adobe PDF (digital & print.) 15.2. Bitmap formats.</p> |
| | <p>Topic 16. Adobe InDesign Interface 16.1. Tools and basic working methods. 16.2. Document configuration. 16.3. Layers. 16.4. Packaging.</p> |
| | <p>Topic 17. InDesign layout and grid 17.1. Master pages. 17.2. Text styles.</p> |
| | <p>Topic 18. Foundations of Design 18.1. Typography. 18.2. Editing and text formatting. 18.3. Page composition.</p> |
| | <p>Topic 19. Photoshop & Illustrator at the service of Adobe InDesign 19.1. Resolution and coloured space. 19.2. PDF Export as an output function.</p> |

7. STUDENTS WORK TIME PLAN/SCHEDULE

| Type of Activity | Total hours |
|---|------------------|
| Theoretical activities | 15 hours |
| Practical activities | 16.5 hours |
| Other mandatory training activities (conferences, seminars, etc.) | 32 hours |
| Tests | 8.5 hours |
| Student's working hours | 33 hours |
| Internship/work placement preparation | 15 hours |
| Student's total working hours | 120 hours |

8. METHODOLOGY

| | |
|---|--|
| Theoretical-practical activities | <p>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.</p> <p>Each 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.</p> |
| Other mandatory training activities (conferences, seminars, etc.) | <p>Attendance to the digital tools workshop: 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.</p> |

9. EVALUATION AND GRADING CRITERIA AND INSTRUMENTS

Work to be assessed:

1. Being able to apply the basic theoretical and technical knowledge that comprises digital technology.
2. Acquiring the ability, autonomy and dexterity to approach the digital tools included in the program: Adobe Photoshop, Adobe Illustrator and Adobe InDesign.
3. Knowing how to identify and apply graphic strategies through digital technology.
4. Knowing how to handle and understand the concept of "the image" within the printed and digital world.
5. Knowing how to distinguish and analyse different digital formats.
6. Managing the concepts and knowledge acquired in the field of information control and communication.

7. The ability to apply critical thinking when it comes to choosing the required tools and methods to execute different graphic projects, both in print and digital formats.

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. Mandatory tutorials as a follow-up to exercises. |
| Practical activities | Practical exercises will be requested on a weekly basis, these shall mainly be based on the theoretical concepts developed in class and will provide a step-by-step outline for the final project. Handing in the final project. |
| 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-practical activities | <ul style="list-style-type: none"> • 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 | <p>The evaluation/assessment of the practical cases and in turn of the final project will deal with:</p> <ul style="list-style-type: none"> • Coherent practical development of the theoretical contents. • Correct use of the tools proposed for each project. • Adequate use of the technique and own tools. • Correct presentation. • Novelty and creativity of the project. • Punctuality: handing-in projects on time. |
| Other mandatory learning activities (lectures, seminars, etc.) | <p>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.</p> |

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 |
|--|---------------------|
| Final project presentation | 50% |
| Compulsory practical exercises | 40% |
| 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 | Total hours |
|------------------|--|--|----------------|--------------------|
| | | | presence-based | not presence-based |
| Session 1 | TOPICS 1-3 | | | |
| | Theoretical activities | Master class introducing the subject. The teacher shall display documents and images and analyse them using the required ICTs. | 2 hours | |
| | Practical activities | Developing a case-study. | 0,5 hours | |

| Topic 4. Adobe Photoshop Interface | | | | |
|---|---------------------------|---|-----------|---------|
| Session 2 | Theoretical activities | Master class, which will develop the specific topic of the section (image size, resolution, tools). The teacher will display documents and images and will analyse them using the necessary ICTs. | 1 hour | |
| | Practical activities | Producing a case-study. | 1,5 hours | |
| | Other learning activities | Attendance to the digital tools workshop. | | 2 hours |

| Topic 5. Working with layers | | | | |
|-------------------------------------|---------------------------|--|-----------|---------|
| Session 3 | Theoretical activities | Master class, which will develop the specific topic of the section (transformation, fusion, etc.). The teacher will display documents and images and will analyse them using the necessary ICTs. | 1 hour | |
| | Practical activities | Producing a case-study. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 0.5 hours | |

| Topic 6 & 7. Brush, eraser and text tools | | | | |
|--|---------------------------|---|-----------|---------|
| Session 4 | Theoretical activities | Master class, which will develop 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. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 0.5 hours | |

| Topic 8. Layer Masks | | | | |
|-----------------------------|---------------------------|---|-----------|---------|
| Session 5 | Theoretical activities | Master class, which will develop the specific topic of the section (painting, quick masks, etc.). The teacher will display documents and images and will analyse them using the necessary ICTs. | 1 hour | |
| | Practical activities | Producing a case-study. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 0.5 hours | |

| Topic 9. Adjustment layers applied to photomontage | | | | |
|---|---------------------------|---|-----------|---------|
| Session 6 | Theoretical activities | Master class, which will develop 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. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 0.5 hours | |

| Topic 10. Adobe Illustrator Interface | | | | |
|--|---------------------------|---|-----------|---------|
| Session 7 | Theoretical activities | Master class, which will develop the specific topic of the section (menus, windows, tools, etc.). The teacher will display documents and images and will analyse them using the necessary ICTs. | 1 hour | |
| | Practical activities | Producing a case-study. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 0.5 hours | |

| Topics 11, 12 & 13. Use of layers, selection and drawing tools | | | | |
|---|---------------------------|--|-----------|---------|
| Session 8 to 10 | Theoretical activities | Master class, which will develop the specific topic of the section (layers, selection, brushes, etc.). The teacher will display documents and images and will analyse them using the necessary ICTs. | 3 hours | |
| | Practical activities | Producing a case-study. | 3 hours | |
| | Other learning activities | Attendance to the digital tools workshop. | | 6 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 1.5 hours | |

| Topic 14 & 15. Colour & Output | | | | |
|---|---------------------------|---|-----------|---------|
| Session 11 | Theoretical activities | Master class, which will develop 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. Preparing a Final Project. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 0.5 hours | |

| Topic 16. Adobe InDesign Interface | | | | |
|---|---------------------------|--|-----------|---------|
| Session 12 | Theoretical activities | Master class, which will develop the specific topic of the section (tools, settings, layers and packaging.). The teacher will display documents and images and will analyse them using the necessary ICTs. | 1 hour | |
| | Practical activities | Producing a case-study. Preparing a Final Project. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 0.5 hours | |

| Topic 17. InDesign Layout and Grids | | | | |
|--|---------------------------|---|-----------|---------|
| Session 13 | Theoretical activities | Master class, which will develop the specific topic of the section (pages and styles). The teacher will display documents and images and will analyse them using the necessary ICTs. | 1 hour | |
| | Practical activities | Producing a case-study. Preparing a Final Project. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the case-study proposed at the previous session. | 0.5 hours | |

| Topic 18. Fundamentals of Design | | | | |
|---|---------------------------|---|-----------|---------|
| Session 14 | Theoretical activities | Master class, which will develop the specific topic of the section (typography, editing and typesetting). The teacher will display documents and images and will analyse them using the necessary ICTs. | 1 hour | |
| | Practical activities | Producing a case-study. Preparing a Final Project. | 1 hour | |
| | Other learning activities | Attendance to the digital tools workshop. | | 3 hours |
| | Evaluation | Proactive attitude in the classroom, sharing knowledge, experiences, and tools provided through attendance to the workshop. Follow-up of the Final Project. | 0.5 hours | |

| Presentation of Final Project & exercises. 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 | |

| Comments on the Final Results | | | | |
|--------------------------------------|------------|---|-----------|--|
| Session 16 | Evaluation | Evaluation, comments & information on the Project and exercise results. | 2,5 hours | |

11. TEACHING RESOURCES AND MATERIALS

11.1. General Bibliography

| | |
|-----------|--|
| Title | Illustrator CC ("Diseño Y Creatividad"- Spanish title) |
| Author | Adobe Press |
| Publisher | Anaya |

| | |
|-----------|---|
| Title | Adobe Photoshop CC Classroom in a Book (2017 release) |
| Autor | Faulkner, Andrew; Chávez, Conrad |
| Publisher | Adobe Press, U.S. |

| | |
|-----------|--|
| Title | Making and Breaking the Grid: A Graphic Design Layout Workshop: A Layout Design Workshop |
| Author | Samara, Timothy |
| Publisher | Rockport Publishers Inc. |

| | |
|-----------|---|
| Title | Designing with Type, 5th Edition: The Essential Guide to Typography |
| Author | Craig, James, Korol Scala, Irene |
| Publisher | Watson-Guptill |

| | |
|-----------|--|
| Title | Thinking with Type, 2nd revised and expanded edition: A Critical Guide for Designers, Writers, Editors, & Students |
| Author | Upton, Ellen |
| Publisher | Princeton Architectural Press |

11.2. Additional Bibliography

| | |
|-----------|---|
| Title | Frame Magazine |
| Author | Frame Magazine |
| Publisher | https://www.frameweb.com/ |

| | |
|-----------|---|
| Title | Baseline Magazine |
| Author | Baseline Magazine |
| Publisher | http://www.baselinemagazine.com/ |

| | |
|-----------|---|
| Title | Idea Magazine |
| Author | Idea Magazine |
| Publisher | http://www.idea-mag.com/en/ |

11.3. Websites of interest

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|--|
| www.dafont.com |
| www.fontsquirrel.com |
| www.adobe.com |
| www.youtube.com |
| www.tutsplus.com |
| www.losttype.com |
| www.freepik.com |