

PRINCIPLES OF DRAWING (D1O12)

Type: Obligatory

ECTS credits: 4

Year: First

Term: 1st

Area of knowledge: Graphic expression

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Studies: Graduate in Design

Academic year: 2009-10

1. Presentation of the subject

Principles of Drawing is students' first contact with the elements typical of the drawing discipline, in which they will learn about the materials and languages for graphic communication. Graphic representation is an essential tool for analysing and communicating in the field of design, providing students with knowledge that they will constantly apply in the rest of their classes.

This class is directly complemented by 'Form, Materials and Techniques', as it handles similar subject matter and is used as the basis for representing ideas.

It also fits, to a lesser degree, with the classes 'Project Fundamentals I' and 'Design Methodology', with the aim that the 4 subjects from the first year are connected so that students understand that the knowledge and skills acquired are all related.

Students will be educated on the fundamental concepts of the language of drawing and using its tools to gain an overall understanding of the structure of flat shapes, volumes and spaces. The aim is for them to attain the basic knowledge required to be able to interpret them and represent them according to the established representation systems and codes.

The class is divided into 2 blocks of 3 and 1 credits, respectively. This is an eminently instrumental class.

The freehand sketching exercises part is for 3 credits, including supervision of freehand drawing. The 'supervised studies', for 1 credit, will be done on personal computers on vector drawing topics.

2. Competences to obtain in the class

2.1. General competences

G7 Ability to organise and plan.

G18 Aesthetic sensibility.

G29 Sense of curiosity and a desire to learn new things.

2.2. Specific skills

E35 Formally analyse and summarise the visual environment.

E38 Use drawing to resolve, propose and communicate ideas.

E46 Master the basic language to communicate with freehand drawing.

2.3. Specific competences for the course

- Recognise and apply the technique, vocabulary and graphic codes to analyse the immediate environment of human beings and represent it.
- Know and use the main methods and techniques for representation using manual tools and computer tools.
- Apply the main drawing processes and sketching techniques.
- General basic representation diagrams in two and three dimensions.

3. Competences, contents, methodology and evaluation

3.1. General competences (10%)

| Competences | Contents | Methodology | Evaluation |
|---------------------------------|---|--|--|
| G7 Be able to organise and plan | - Organise and do the exercises assigned in class using the established terms | - File solutions - Organise proposals - Classify versions - Create a work and assignment schedule | 30% From: - Individual assignments |

| Competences | Contents | Methodology | Evaluation |
|-----------------------------------|---|--|---|
| G18 Develop aesthetic sensibility | - Differentiate levels of quality and aesthetic aspects | - Analyse the masters and copy models - Create a checklist with the attributes of a work - Work on the initial versions after they are corrected - Detect details | 40% From: - Individual assignments - Group corrections |

| Competences | Contents | Methodology | Evaluation |
|--|--|--|---|
| G29 Esteem a sense of curiosity and a desire to learn new things | - Observe and recognise the reality present in our daily environment | - Detect details - Research innovations in the field of design - Read current affairs articles | 30% From: - Individual assignments - Group corrections |

3.2. Specific competences (30%)

| Competences | Contents | Methodology | Evaluation |
|---|------------------------------|---|--|
| E35 Formally analyse and summarise the visual environment | - Monitor a specific process | - Apply a development method to a specific case selected by each student - Be situated in the three-dimensional space and study points of view - Translate 3 dimensions into 2 by drawing reality | 40% From: - Individual assignments |

| Competences | Contents | Methodology | Evaluation |
|---|---|---|--|
| E38 Use drawing to resolve, propose and communicate ideas | - Represent conceptual elements - Persuade | - Apply an execution method to a typical case - Create process sketches and final drawings | 30% From: - Individual assignments |

| Competences | Contents | Methodology | Evaluation |
|--|---|--|---|
| E46 Master the basic language to communicate with freehand drawing | - Use of graphic vocabulary with correction | - Combine different details into a final whole - Do exercises with different levels of complexity | 30% From: - Individual assignments - Group corrections |

3.3. Specific competences for the course (60%)

| Competences | Contents | Methodology | Evaluation |
|---|--|--|--|
| - Recognise and apply the technique, vocabulary and graphic codes to analyse the immediate environment of human beings and represent it | - Bring together different treatments and techniques | - Translate what we really see into a given format - Close-up studies | 25% From: - Individual assignments |

| Competences | Contents | Methodology | Evaluation |
|---|---|--|--|
| - Know and use the main methods and techniques for representation using manual tools and computer tools | - Represent objects using our hands and computers | - Experiment with the components of a composition - Create compositions | 25% From: - Individual assignments |

| Competences | Contents | Methodology | Evaluation |
|---|-------------------------------|---|--|
| - Apply the main drawing processes and sketching techniques | - Differentiate between codes | - Develop different codes according to a personal vision - Use the technical codes | 25% From: - Individual assignments |

| Competences | Contents | Methodology | Evaluation |
|---|-------------------------------------|---|--|
| - General basic representation diagrams in two and three dimensions | - Use of typical graphic vocabulary | - Develop different codes according to a personal vision - Use technical codes to visually explain specific issues | 25% From: - Individual assignments |

4. **Methodology**4.1. Activity types

- The class will have 10 lecture-workshop sessions. The lecturer will explain the drawing topic to be developed and then students will create drawings. Lecturers will guide and orientate students and resolve questions during this work process. Subsequently, the works will be hung for group comments and correction by the professor. Students will have to do another drawing as homework, which will also be corrected and commented on in the following class.

- Practical exercises will be started during class sessions. School time will be used to resolve any questions that arise, as well as potential problems. Every week there will be a homework exercise with the same contents that were explained in class. The class will start with a group correction of the homework exercise and then they will be collected. Optionally, a teaching instruction will be distributed in each class for follow through of the lecturer's explanations, particularly in the supervised studies.

- Learning is understood as progressive and it is therefore compulsory for students to not miss the explanations or corrections. This system entails the active participation of students, doing homework on their own, but with the support of the notes and the specifications given out in class.

4.2. Schedule

Week 1

| | Hours | Classroom activities | Activities outside the class | Evaluation activities | | |
|-------------------|-------|---|------------------------------|-----------------------|------|----|
| | | | | Nature | Type | %* |
| Lectures | 1.5 | Fundamentals of sketching | Line drawing Work 1 | Obligatory | Form | 10 |
| Seminar | 1.5 | Fundamentals of sketching: quality of lines | | | | |
| Supervised study: | 2 | Principles of vector drawing | Exercise 1 | | | |

Week 2

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|---------|-------|--|--|-----------------------|-----------------|----|
| | | | | Nature | Type | % |
| Seminar | 3 | Fundamentals of sketching: drawing outlines and flat shapes + correction of Work 1 | Drawing outlines and flat shapes Work 2 | Obligatory | Cont. and final | 10 |

Week 3

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|-------------------|-------|---|---|-----------------------|-----------------|----|
| | | | | Nature | Type | % |
| Seminar | 3 | The figure: drawing outlines and flat shapes + correction of Work 2 | Drawing outlines and flat shapes (proportion) Work 3 | Obligatory | Cont. and final | 10 |
| Supervised study: | 2 | Vector drawing + correction of Work 1 | Exercise 2 | | Cont. | |

Week 4

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|---------|-------|---|--|-----------------------|-----------------|----|
| | | | | Nature | Type | % |
| Seminar | 3 | The figure: drawing outlines and flat shapes (texture) + correction of Work 3 | Drawing outlines and flat shapes (texture) Work 4 | Obligatory | Cont. and final | 10 |

Week 5

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|-------------------|-------|---|---|-----------------------|-----------------|----|
| | | | | Nature | Type | % |
| Seminar | 3 | Figure and background: Drawing volumes (dihedral, axonometric and conical views) + correction of Work 4 | Drawing volumes (dihedral, axonometric and conical views) Work 5 | Obligatory | Cont. and final | 10 |
| Supervised study: | 2 | Vector drawing + correction of Work 2 | Exercise 3 | | Cont. | |

Week 6

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|---------|-------|--|---|-----------------------|-----------------|----|
| | | | | Nature | Type | % |
| Seminar | 3 | Details and sections: drawing volumes (dihedral, axonometric and conical views) + correction of Work 5 | Drawing volumes (dihedral, axonometric and conical views) Work 6 | Obligatory | Cont. and final | 10 |

Week 7

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|-------------------|-------|--|---|-----------------------|-----------------|----|
| | | | | Nature | Type | % |
| Lectures | 1.5 | Modules and structures | Modules and structures: (dihedral, axonometric and conical views) Work 7 | Obligatory | Cont. and final | 10 |
| Seminar | 1.5 | Modules and structures: (dihedral, axonometric and conical views) + correction of Work 6 | | | | |
| Supervised study: | 2 | Drawing and resources + correction of Work 3 | Exercise 4 | | Cont. | |

Week 8

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|---------|-------|---|---|-----------------------|-----------------|----|
| | | | | Nature | Type | % |
| Seminar | 3 | Drawing volumes: greys and chiaroscuro + correction of Work 7 | Drawing volumes: greys and chiaroscuros Work 8 | Obligatory | Cont. and final | 10 |

Week 9

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|-------------------|-------|---|--|-----------------------|-----------------|----|
| | | | | Nature | Type | % |
| Seminar | 3 | Proportion and scale (dihedral, axonometric and conical views) + correction of Work 8 | Proportion and scale (dihedral, axonometric and conical views) Work 9 | Obligatory | Cont. and final | 10 |
| Supervised study: | 2 | Drawing and application + correction of Work 4 | Exercise 5 | | Final | |

Week 10

| | Hours | Classroom activities | Homework | Evaluation activities | | |
|---------|-------|--|--|-----------------------|-------|----|
| | | | | Nature | Type | % |
| Seminar | 3 | Proportion: drawing volumes, interiors (dihedral, axonometric and conical views) + correction of Work 9 and guidance for the final dossier | Proportion: drawing volumes (dihedral, axonometric and conical views) Work 10 | Obligatory | Final | 10 |

* The 100% total of this column corresponds to 80% related to participation in seminars and handing in the weekly assignments

5. Evaluation

Evaluation is based on three obligatory core areas:

- Participation in seminars: 50%
- Handing in of weekly assignments: 30%
- Final dossier: 20%

Evaluation is done by the weekly handing in of drawings done in class and at home, which will be commented on and marked in the following class. The average of these evaluations generates the final score for the first exam sitting.

To qualify for the first exam, students must have attended at least 80% of classes.

There are 2 exam sittings to pass the class: once after the regular class finishes, which lasts 10 weeks, and another in July.

After the class finishes and students have been evaluated, a review day is scheduled of qualifications during which students can ask the professor to explain the mark they obtained. If the student fails, this day will be used to establish which parts of the work need to be corrected or repeated. If students do not come, they will have to hand in all exercises done in the class.

The professor will not supervise or correct after the ordinary 10-session class has ended.

In the 'seminar' section, an individual drawing exam will be done in the second exam sitting, in addition to handing in the assignments.

In the 'supervised study' section, students must have passed the personal test in order to have the option to have the practical exercises evaluated. There will be a personal test in the first and second examinations, if the professor did not establish that students only have to hand in assignments in the second examination.

Evaluation is ongoing. Weekly assignments must be turned in that are done by the students as homework on the contents explained in class. Partial assignments are obligatory. If an exercise is not turned in on the due date, it must be turned in at the end of the term without an option for correction. These partial assignments are for formative evaluation and will be evaluated by the professor or in a joint evaluation (co-evaluation). Students will personally reflect on the correction in order to improve future proposals.

Evaluation criteria:

- Acquiring the competences.
- Demonstration of an evolving process in acquiring skills.
- Content of exercises suitable to the assignment.
- Effort: variety of proposals created, depth of the study.
- Response capacity to problems that arise during the process.
- Viability of results.
- Professionalism, degree of independence in executing the exercises.
- Ability to communicate logically and motivate in proposals.
- Quality of the presentation (verbal and visual).
- Final finish of the product.

6. Sources of information and teaching resources

Bibliography

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MAIER, MANFRED. *Procesos elementales de proyectación y configuración*. Barcelona: Gustavo Gili. 1987.

OLPE, PETER. *Drawing in design process*. Basilea: Niggli, 1997.

Parramón [ed.] *Fundamentos del dibujo artístico*. Barcelona: Parramón ediciones, 2002.

RAYA MORAL, B. *Perspectiva*. Barcelona: Gustavo Gili. 1979.

REVILLA BLANCO, ALBERTO. *Prácticas de dibujo técnico. 6. Vistas y visualización de piezas*. Sant Sebastià: Editorial Donostiarra. 1992.

RODRÍGUEZ DE ABAJO, FCO. JAVIER; ÁLVAREZ BENGOA, VÍCTOR. *Curso de dibujo geométrico y de croquización*. Alcoi: Editorial Marfil. 1981.

THOMAE, REINER. *Perspectiva y axonometría*. Barcelona: Gustavo Gili. 1981.

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Teaching resources

Dossier of files of examples and works that the lecturer hands out each class, including graphic material so students can do the corresponding exercise for each topic.

A chalkboard and chalk is also required for the professor to explain the exercises, as well as a computer and projector for lecture class and supervised study explanations.

Besides paper and pencils, students will need rigid board for drawing and Din A4 acetate paper.