

**COURSE DATA****DATA SUBJECT**

Code: 42940
Name: Generic skills
Cycle: Master's Degree
ECTS Credits: 5
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2109 - Master's Degree in Experimental Techniques in Chemistry	Facultat de Química	1	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2109 - Master's Degree in Experimental Techniques in Chemistry	Generic skills	COMPULSORY

COORDINATION

ESTEVE TURRILLAS FRANCESC ALBERT

SUMMARY

Subject dedicated to the achievement of activities adapted for the acquisition of competitions derived from the scientific, technical and human formation, such as the preparation of a written work, assistance to courses related to general or concrete aspects of the Sciences, its implication for the society or the environment, languages, computer science, etc. It is possible recognized credits previously realized by the student if they bring him this type of competences.

Regarding the Sustainable Development Goals (SDGs), it is expected that students will be able to know in this subject how to apply the knowledge learned to guarantee an inclusive, equitable, and quality education and promote learning opportunities for everyone (SDG 4), to acquire a special sensitivity for sustainable management of water (SDG 6), raw materials and energy sources (SDG 7), as well as for an environmentally friendly and sustainable development (SDGs 11, 12, 13, 14 and 15), in addition to being able to design, select and/or develop efficient products, chemical processes, and analytical methodologies (SDG 7) that minimize their impact on the environment (SDGs 14 and 15), using alternative raw materials and reducing wastes (SDG 11).

PREVIOUS KNOWLEDGE



RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

Prior knowledge of chemistry and experimental work in the laboratory of chemistry taught in the degrees indicated in the recommended income profile for the student of the master's degree are required.

COMPETENCES / LEARNING OUTCOMES

2109 - Master's Degree in Experimental Techniques in Chemistry

Be able to access the information required (databases, scientific articles, etc.) and to interpret and use it sensibly.

Be able to access to information tools in other areas of knowledge and use them properly.

Poseer las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.

Ser capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios.

Students should possess and understand foundational knowledge that enables original thinking and research in the field.

To be able to assess the need to complete the scientific, historical, language, informatics, literature, ethics, social and human background in general, attending conferences, courses or doing complementary activities, self-assessing the contribution of these activities towards a comprehensive development.

DESCRIPTION OF CONTENTS

1. Acquisition of generic skills related to the information and the integral formation through realization of programmed activities

- Self-awareness and skills development for employability.
- Foreign trade and the General State Administration. Roles of the chemist.
- Communication skills and conflict management in work teams.
- Scientific Writing Workshop: Convincing your Audience to Publish and Fund your Science



- Leadership and management skills for teamwork.
- Scientific innovation methods: From university to business?
- Socio-emotional skills.
- Active job search in private companies. How to navigate selection processes.
- Cost analysis in a laboratory.
- Introduction to biosensors. What are biosensors? Concepts and applications.
- Resilience, self-esteem, and assertiveness.
- Impactful communication.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	50,00
Total hours	50,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	75,00
Independent study and work	0,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	75,00

TEACHING METHODOLOGY

In the single subject matter of the Transversal competencies and of the same denomination, the students will be tutored by some of the teachers who are part of the Academic Coordinating Commission of the Master (which should not match the tutor assigned to the Master Thesis).

Throughout the course, the Academic Coordinating Commission of the Master, (ACC Master) will organize workshops, conferences or round tables, etc, related to general or specific aspects of the science, its implication for the society or the environment, etc. , or other courses that will broaden the integral



formation that may assist students (formative activity 1).

Also the students will attend the tutorials with the tutor professor who have been assigned, to select the work to be done based on the courses assisted (activity 2) and in other topics proposed by the ACC Master

Students will develop a written memory about the work carried out.

The Academic Coordinating Commission of the Master may exempt from the completion of the work (activity 2) to the students that have a degree of 300 ECTS or higher if they have coursed optional subjects that aporte transferable skills

EVALUATION

FIRST CALL

Attendance at tutorials for the realization of activity 2 (work) and/or participatory assistance to activity 1 (programmed course/s)

The competences to evaluate: specifics: CB6, CB8 y CB10

WEIGHT 20 %

Preparation of a report on received courses (activity 1) and on the work carried out (activity 2)

The competences to evaluate: specifics: CG3, CB6, CT1 y CT2

WEIGHT 80 %

The minimum overall grade to pass the course is 5.0.



SECOND CALL

The evaluation will be carried out in the same way as in the first call.

REFERENCES