

# INITIATION PROGRAM IN TEACHING FOR NEW RESEARCHERS

## IniDoc

### INTRODUCTION

At the monographic panel to debate the advisability of rethinking the learning experience at the UPC, held in two sessions in October 2022, it was possible to observe data on the very positive assessment that undergraduate and master's students made for those activities taught by doctoral students and research staff.

On the other hand, some of the researchers at the UPC may intend to pursue an academic career at the institution, joining in the future, some of its teaching bodies and, therefore, may be interested in training as such.

### OBJECTIVES OF THE PROGRAM

1. To provide a basic level of teaching skills necessary in higher education among our novice researchers, as a complement that can contribute positively to their professional development and the generation of teaching vocations.
2. Generate institutional instruments that facilitate the achievement of the objectives pursued by the Galaxy Learning project, in particular to enrich the undergraduate and master's teaching training of new researchers.

### MAIN CHARACTERISTICS

#### Teacher training program

The general objective of the program is for participants to acquire basic knowledge and skills in university teaching, as well as reflect on how to address the main challenges in higher education. The core of the program will be mentored teaching practices, which will be accompanied by a series of seminars that will provide the theoretical and methodological bases to begin an updated and innovative teaching. The program will last 2 years.

At the end of the program, participants will have developed the skills to:

- Identify the basic principles of learning and their application in the classroom
- Determine the characteristics of active and student-centered learning models
- Plan learning activities, projects and teaching plans
- Apply different learning methodologies
- Compare different learning assessment methods and instruments
- Formulate proposals for innovation in higher education

The activities of the teacher training program will be the following:

- A. Face-to-face and online training seminars in basic teaching concepts and methodologies, taught by the ICE (9 hours distributed between the 2 years)
- B. Teach theoretical or practical classes in the subject or subjects, determined by the mentor.
- C. Tutorials with students who have been taught to resolve doubts.
- D. Other activities specified by the mentor: attendance at conferences, preparation of teaching materials, supervision and correction of exams and assignments, observation of personal tutorials, etc.

The dedication of the teaching practices of the training program must be 30 hours per year.

The teaching practices will be agreed between the academic mentors and the young researchers before starting the program.

The participation of doctoral students in teaching activities may not involve responsibility or coordination on subjects, nor participation in end-of-study work panels or the signing of evaluation documents.

More detailed information about the Program can be found in appendix 1.

#### Academic mentoring

The academic mentors will be UPC professors with teaching experience who will supervise the teaching practices of the young researchers, with the role of "Academic Collaborator":

- This person will be responsible for the teaching practices of the young researchers. These will be developed in the subject or subjects taught by your mentor.
- This person will guide the academic collaborator in the preparation and execution of his teaching practices, as part of the supervision of his training plan.
- This person will accompany the academic collaborators in their teaching practices, guide them professionally and promote the innovative spirit in teaching.
- This person must ensure that the academic collaborator is competent to teach the teaching content and that he accepts the planning of the teaching activities and commits to it.
- This person will prepare a short evaluation report at the end of each course

The participation of young researchers in teaching tasks will have an impact on departmental assignments when their contract states that they must teach. In the other cases, it will not have any impact on the ability of the academic mentors to assume their teaching assignments; that is to say, it will not lead to any change in the assignment at departmental level.

The mentors will receive a certificate from the ICE that will recognize their dedication and that will count towards the accreditation of teaching merits at the UPC, in accordance with what is established in the regulations for this process.

Each academic mentor may simultaneously mentor a maximum of two academic collaborators.

## Participants in the teacher training program for novice researchers

New researchers participating in the teacher training program:

- They will do this as part of their personal training plan and, in the case of PhD students, it will be reflected in the PhD Student Activity Document (DAD).
- They undertake to participate in all the teacher training seminars organized by the ICE.
- Under the supervision of the person who develops the academic mentoring, the participants will develop the practical activities of their training in accordance with the intended dedication and the objectives of the teacher training program.
- They will prepare a short report of their training activities and with the assessment of their satisfaction with the participation in the program and the academic mentoring received.
- Completion of the program activities will be recognized with a "Certificate of training in teaching skills (Academic Collaborator)" issued by the ICE, which will specify the teaching hours taught and the subjects in which has participated

## Monitoring and evaluation of the program

The Teaching Training Program for new researchers will be evaluated each academic year by a commission that will be chaired by the vice-rector with responsibility for the ICE and that will have the participation of representatives from the Doctoral School and the ICE.

The aspects that will be assessed will be:

- Participation in the program
- The satisfaction of the participants in the program
- The satisfaction of the people who carry out the academic mentoring
- The satisfaction of students who have received teaching, teacher surveys

## PILOT EXPERIENCE

For the 2023/24 academic year, it is proposed to develop a pilot experience.

Participation in this pilot experience implies the acceptance of the people involved to collaborate with the ICE in the follow-up activities that are determined to improve the design of the program, as a step prior to its extension throughout the community

Phases of the pilot experience

May 2023

- Information prior to the PDI (call for participation)
- Public information and through the doctoral school to new researchers
- Application for access to the program (short CV, letter of motivation specifying the name of the academic mentor and letter of recommendation from the thesis director, in the case of doctoral students or the head of the research group, in the case of postdocs )

June 2023

- Selection of participants by the Doctoral School and the ICE. For the pilot experience, a group of 50 places will be created. Priority will be given to doctoral students who have FPU and FPI scholarships, who must teach by contract and who have submitted the research plan. Among postdoctoral researchers, priority will be given to those who have a contractual relationship that involves teaching.
- Communication to selected candidates (before the start of the academic year)

July 2023

- Online information session for all participants.
- Development of training seminars

September 2023 to June 2024

- Development of practical mentored training activities
- Evaluation report of the pilot experience: improvement proposals for the second edition of the program and recommendations for scalability
- Planning the second edition of Program and scalability

APPENDIX I

## Teacher training program

### Program of university teaching seminars

Title	Summary	Teaching period
From scientific evidence to the classroom: design of grounded teaching practices	The main theories and evidence on how people learn will be presented and discussed with the aim of learning how to design grounded teaching practices	1st year
Active and participatory learning methodologies to develop skills	Based on the key ideas of the first seminar, different types of active and student-centered teaching methodologies that can be used in university teaching will be analyzed, such as based learning in problems and projects, the flipped classroom, collaborative learning, gamification, among others	1st year

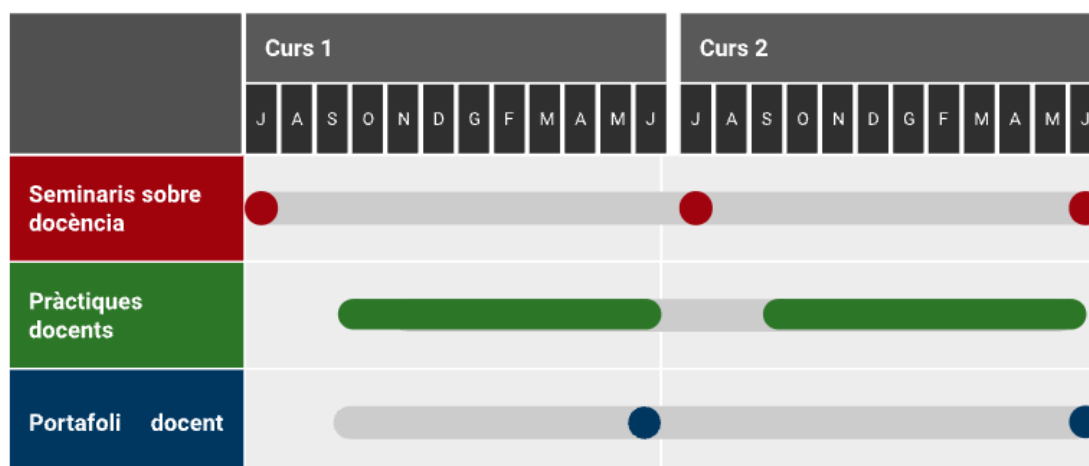
Teaching planning: strategies to define objectives, design activities, classes and subjects	Considering the current trends in teaching innovation in higher education, tools will be provided to design different types of training activities, from a learning activity, to a didactic unit or a complete subject. Participants will be accompanied in the design of some of their teaching practices.	1st year
Assessment of learning	Assessment is one of the aspects that most determines how students learn, which is why it is important to think deeply about how we use it. In the seminar, the purpose of the evaluation will be discussed and different models and instruments will be analyzed that are useful for learning, developing skills and improving the work as teachers	2nd year
Education for sustainability	Universities have undertaken to promote the deployment of the Sustainable Development Goals (ODS) of the 2030 agenda and tools are needed to introduce them to teaching. In this seminar, some teaching methodologies will be introduced to promote the development of key competences for sustainability through the ODS.	2nd year
Research and reflection on teaching practice	Based on the teaching experiences of the participants, tools for their analysis and possible improvements will be provided. The "Scholarship of Teaching and Learning" model of research and reflection on the teaching activity will be introduced as a way of teaching professional development.	2nd year

### **Evaluation of the participants**

Participants will be evaluated through a teaching portfolio. This will include evidence of the teaching tasks carried out during the program, a student reflection report on their experience at the end of the first year and at the end of the second year, and a short report from the mentor.

The program coordination team will evaluate the student's performance with the above information.

## Calendari d'activitats



Els cursos 1 i 2 es representen de juliol a juny, d'acord amb l'inici i el final del Programa