Course: Trends in Biomolecular Science

Teacher: shared among members of the PhD course

Length: 2.5 CFU (20 hours)

## Objective:

Biomolecular science is a research area that profits from a strong multidisciplinary expertise on genetics, microbiology, molecular and cell biology, structural biology, biochemistry, synthetic and systems biology, etc. This course is aimed to provide advanced and updated knowledge through a theoretical and practical training oriented to provide the required skills for supporting the students in their biotechnological research projects (in the different fields of application).

## **COURSE TOPICS**

Over the years, the course will focus on most recent trends in molecular and cell biology related to:

- Analytical methods
- Advanced cell biology
- Advanced cell biochemistry
- Biopharmaceuticals: from concept to production
- Biomolecules
- Biotransformation and biocatalysis
- Experimental design and research methodology
- Molecular genetics
- Molecular microbiology
- Molecular system biology