



Visiting Professor Program Academic Year 2023/2024

TEACHING COMMITMENT: 12 hours

COURSE TITLE

Biotechnological Applications of Microorganisms

TEACHING PERIOD

2nd term

SCIENTIFIC AREA

Systematic Botany

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

The course aims to provide the theoretical and practical skills to explore and exploit the potential of the use of microorganisms for biotechnological applications in different industrial processes and environmental level.

LEARNING OBJECTIVES

Knowledge of the morphological and physiological bases that allow different groups of microorganisms to survive in different environments.

Criteria for selecting and optimize the exploitation of different types of microorganisms in different biotechnological processes in bioremediation, biological control, in biocatalysis, in the production of metabolites of interest, etc..

TUTORSHIP ACTIVITIES

N/A

LAB ACTIVITIES

N/A

OTHER ACTIVITIES BESIDES THE COURSE

N/A

VISITING PROFESSOR PROFILE

Expertise should be focused on teaching and research activities related to the biotechnology, physiology and cultivation of algae (microalgae and seaweeds). It should demonstrate a wide experience in the characterization and laboratory and pilot-scale cultivation of microalgae, cyanobacteria and macroalgae. Research objectives include biodiversity conservation, physiological and biochemical characterization, transformation and development of applications of algal biomass for different sectors (food and feed, cosmetics, biomedical, agriculture,...), and the development of ecosystemic possibilities related to wastewaters and CO₂ biofiltration/bioremediation systems by using algae.

CONTACT REFERENT

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