

Direzione Ricerca, Innovazione e Internazionalizzazione

> ID VP_019_BIOTEC

Visiting Professor Program Academic Year 2025/2026

TEACHING COMMITMENT: 16 hours

COURSE TITLE Mathematics and Biostatistics

TEACHING PERIOD I semester

SCIENTIFIC AREA Mathematics Education

LANGUAGE USED TO TEACH English, Italian

COURSE SUMMARY

The main topics of the course are: Mathematical Models in Sciences; Linear Algebra; Discrete models: geometric progression and applications; Derivative of a function and its application in optimization problems; Graphs of functions and their transformations; Integral Calculus and applications; Differential models: Malthus and logistic models, Applications of Differential equations in Biology and Medicne; Statistics.

LEARNING OBJECTIVES

The course aims to provide the students with the basic mathematical concepts and tools needed to describe, sketch and understand the main aspects of the reality around us, mainly concerning problems of interest in Biology. The course aims to increase student understanding skills and to enable them to acquire a rigorous and analytical way of thinking and tackling new problems. The lessons of the statistical part presents the basics arguments in descriptive and inferential statistics necessary for all the applied sciences.

OTHER ACTIVITIES BESIDE THE COURSE

The Visiting Professor will also give seminars and conferences addressed to PhD students (Digital Humanities) and research fellows.

VISITING PROFESSOR PROFILE

The Visiting Professor candidate should meet the following requirements:

- Strong background in Mathematics, particularly in the field of Mathematic Education and Computational Finance Education demonstrated by scientific publications and participation at international meetings.

- At least five years of work experience in an English-speaking Academic Institution

- Teaching experience

CONTACT REFERENT

Marina Marchisio Conte marina.marchisio@unito.it