ID

VP63_DIP_MAT

Visiting Professor Program
Academic year 2020/2021

DEPARTMENT OF MATHEMATICS "GIUSEPPE PEANO"

TEACHING COMMITMENT: 16 hours

COURSE TITLE

Biomathematics

TEACHING PERIOD
2nd term

SCIENTIFIC AREA
Numerical Analysis

LANGUAGE USED TO TEACH
English

COURSE SUMMARY
The course reviews basic topics, to reinforce basic knowledge but develops also new concepts. Use of papers in the current literature allows the students to improve their reading abilities, also in a foreign language. The course is a first step in building advanced models in biological applications and in tackling research problems. The projects and lab activities stimulate the students' problem solving abilities. At the start of the course some historical facts on this discipline are related. The discrete models presented could be used at the high school level.

LEARNING OBJECTIVES
The student is supposed to further his knowledge, recognize the errors in the model formulation and to correct them. The discussion with the teacher and other students helps in achieving this goal, it is the main reason for which the final projects are given to small teams of students. The students must also consult the current literature in the field, which is a necessary step to start research and new situations.

TUTORSHIP ACTIVITIES (IF APPLICABLE)

LAB ACTIVITIES (IF APPLICABLE)

OTHER ACTIVITIES (IF APPLICABLE)

Seminars for the interested doctoral students in the programs in Mathematics and Complex Systems could also be offered during the visit. Joint research with interested members of the Mathematics department would also be fostered.

VISITING PROFESSOR PROFILE DESCRIPTION

The successful candidate should have a solid research experience in biomathematics, in particular in the subfield of epidemiology, where he/she should have an outstanding records of performance also in services outside the academics. Further, he/she should have supervised a good number of graduate students. He/she should have a record of fundings for his/her research, should have visited relevant research institution in and outside that the own country, be or have been involved in Editorial Board of at least five international journals in the field of biological mathematics. He/she should have been involved in the organization of important international conferences and a record of scientific publications of high quality, in particular in the area of epidemiology. He/she should have a record of collaboration with industry, and have had research fund support.

CONTACT PERSON AT THE DEPARTMENT

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