Study Programme: MSc in Biology

Degree level: Master degree

Course Title: Nematology

Professor: László Barsi

Required/Elective Course: elective

Number of ECTS: 8

Prerequisites: –

Course Objective: Goal of this course to get acquainted students with general characteristics of free-living and plant parasitic nematodes, and basic techniques used in work with them.

Course Outcome: After finishing the course students will be familiar with general characteristics of free-living and plant parasitic nematodes, and basic techniques used in work with them.

Course Content:

Theoretical part

Free-living and plant parasitic nematodes; Structure and organisation of nematodes; Reproduction by nematodes; Bioecology; Evolution of parasitism; Plant nematodes in modern agriculture; Control of plant parasitic nematodes. *Practical part*

Sampling procedure: soil and plant material; Nematode extraction; Killing and fixing nematodes; Temporary and permanent slides; Morphology and anatomy of free living and plant parasitic nematodes; Characters used in nematode identification; Use of identification keys.

Reading List:

Ferraz, L.C.C.B. and Brown, D.J.F. 2002. An Introduction to Nematodes: Plant Nematology. A student's textbook, Pensoft Series Parasitologica No 3. Pensoft, Sofia-Moscow.

Machado, A.C.Z, Siquiera, K.M.S & Araújo Filho, J.V. 2010. Methods and techniques in plant nematology. Amazon Distribution GmbH, Leipzig.

Southey J.F. (ed.) 1970. Laboratory methods for work with plant and soil nematodes. Technical Bulletin 2. Her Majesty's Stationery Office, London.

Weischer, B. and Brown, D.J.F. 2000. An introduction to Nematodes: General Nematology. A student's textbook, Pensoft Series Parasitologica No 1. Pensoft, Sofia-Moscow.

Total hours: Lectures: 2 Practicals: Other: 2 Student research work: 5 Methods of instruction: Assessment (maximum number of points 100) Requirements Final exam points points Active participation in lectures Practical exam 30 Active participation in practicals Test 20 Test(s) or Oral exam 20 Pre-exam testing Seminar paper 30 Remark: