Course Unit Descriptor

Study Programme: Fruit science, viticulture and horticulture (module -Nursery production)

Course Unit Title: Seed Production

Course Unit Code:19.RIP023

Name of Lecturer(s): Ass. Prof. Velimir N. Mladenov, PhD

Type and Level of Studies: Undergraduate Academic Studies

Course Status (compulsory/elective): compulsory

Semester (winter/summer):summer

Language of instruction: serbian

Mode of course unit delivery (face-to-face/distance learning): face to face

Number of ECTS Allocated:4

Prerequisites:

Course Aims:

To familiarize students with the latest developments in the field of biotechnology and new methods that can be used in seed production. The case is based on theoretical assumptions.

Learning Outcomes:

It allows the student to understand the current trends in seed and point out that the scientific discipline should focus its future work.

Syllabus:

Theory

Introduction and definition of seed production (definition of seed production, the general concepts related to seed production); Task organization and seed production (seed production in the broadest sense, the multiplication of seed cultivars, preservation of morphological, biological and agronomic traits of seed varieties within tearing, degeneration varieties, biological mixing of seeds, the onset of disease and pests, mechanical mixing varieties); Economics and economic importance of seed production (international organizations dealing Seed programs for seed production, organization and transport of seeds in Serbia, organizations that contribute to the improvement of seed production in Serbia, the results achieved in seed production in Serbia); Legislation in seed (the legislation in the world and the EU Legislation in Serbia, Supervision of seed production and recognition of seed crops, seed dressing and preparing for transport, seed quality and its labeling); Biological and morphological characteristics of the seed (seed anatomy and morphology of monocotyledonous and dicotyledonous plants, seed position on the maternal plant, size, shape and weight of seeds, seed health); Cultural practices in seed production (crop rotation and rotational crops, tillage, seedbed preparation, fertilization of crops, sowing, irrigation, cropping seed crop, varietal weeding and removing the balloon, supplementary pollination, crop protection, harvesting); Ecology seeds (environmental conditions, yield and quality, physiological model to maintain the quality of seeds, the impact of environmental factors on seed characteristics, temperature and humidity, light, ecological significance of dormancy).

Practice

The practice will follow the teaching unit, students will prepare essays from certain areas, which will present during the practice. For the preparation of seminar papers using the latest sources of literature from international journals.

Required Reading:

1. Copeland and McDonald. 2001: Seed Science and Technology, Kluwer Academic Publishers.			
Weekly Contact Hours:	**Lectures:** 90	**Practical work:** 60	**Other teaching types:** 30
Teaching Methods: Lectures and Practical classes, Consultations if needed.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	**Final exam**	points
Active class participation	10	written exam	30
Practical work	20	oral exam	20
Preliminary exam(s)	30	…….	
Seminar(s)			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			