UNIVERSITY OF BELGRADE
FACULTY OF AGRICULTURE

PROFESSIONAL MASTER - SUSTAINABLE AGRICULTURE

Introducing a model of integrated sustainable agricultural production in Serbia is a long-term requirement for keeping population healthy and promoting environmental protection. Many of the economic and social problems or some aspects of many other problems having developed over the past decade in Serbia can be partially or completely worked out by means of an integrated program of sustainable agricultural production development.
Additional reasons for introducing the system of sustainable agriculture in Serbia are as follows:

- all over the world increasing consumer demands and needs for safe food,
- growing health problems of humans and farm animals caused by the application of pesticides, antibiotics and hormones,
- increased environmental pollution by pesticides, other agrochemicals and organic wastes,
- the need to reduce water pollution,
- the need to recycle nutritive wastes,
- prevention of genetically modified foods consumption,
- long-term integration of animal and plant production, promotion of plant and animal production diversity due to evident biodiversity decline within certain ecosystems i.e. biodiversity decline in the sphere of agricultural production (the need to increase biodiversity, crop numbers and varieties without agrochemicals application as well as afforestation),
- linking consumption with population awareness, the need to change agricultural practice,
- discovery of new energy sources (biogas and biomass production),
- prevention of soil degradation leading to lower production (erosion control measures, increase of organic materials),
- sustainable agriculture and organic farming are inexpensive production methods, hence it is a requirement to expand agricultural output capacity, reduce production costs, increase income, organize and associate farmers.

To solve the problems and to make sure that future generations can enjoy the benefits of the earth`s resources, better and more careful management of these resources in agriculture is needed.
This PM Programme is compatible with university courses worlwide. It offers: a Professional Master Degree qualifying students for admission to a M.Sc. and Ph.D. Programme; assessment on the basis of the internationally recognised Credit Point System. The course is designed to increase the students operational knowledge and technical skills needed to analyse and solve problems related with introduction new technologies of food production in the field of sustainable agriculture.
This programme is designed also for professionals with specific interest in the application of sustainable technologies in food production and environmental protection. They participate actively in the struggle for human and animal health: agricultural producers, employees in food processing industry, organic foods distributors, inspectors in charge of organic foods production control, as well as planners, managers and policy makers in governmental and non-governmental organizations concerned with agricultural production and environment.
Their professional participation may include land use planning, rural development, land and water management, nature conservation, information system development, research and

education. Participants should have a background in agriculture, biology, ecology, soils, ecological economics or similar fields. It is essential for people working in this field to have sound knowledge of the natural, economic, and social factors in agricultural production. A further prerequisite is familiarity with interdisciplinary work.

COURSE DESCRIPTION

The PM Programme extends over 12 moths and consists of two in-class blocks and one block for final asignment. In-class blocks lasting three-four weeks each starting from october to april and students should finish their final asignment untill september. The course is an interdisciplinary programme and comprises a combination of compulsory and optional modules. There are six compulsory modules serve to broaden students` knowledge in ecology, natural and genetic resources, economy and rural development. From the list of the optional modules at least three modules have to be selected for further in-depth study and for narrow spetialisation. After completion of a module the students sit an examination. Towards the end of the course, each participant undertakes an final assignment tailored to his or her particular situation and interests.
The PM Programme is organised in 60 university credits. Each module has 5 credits and each credit consist in 25 hours. Credits related to lectures and seminars are divided in three groups: “face to face” lecture (4 hours), e-learning (6 hours) and individual study (15 hours). For field stages and final assignment 1 credit consists in 25 hours divided as follow: 2 hours with tutor and 23 hours individual work/study. Final assignment has 15 credits.

A detailed programme will be discussed later.

INTERMEDIATE AND FINAL OBJECTIVES

The intermediate objectives are the activation of the Master by September 2002 and the recognition of the Diploma/Title the year after (by September 2003).
The final objective if the continuation of the program from September 2004 with own resources (sustainability of the program).

REALIZATION AND MANAGEMENT OF THE PROGRAMME

The majority of the modules will be taught by professors of the Faculty of Agriculture, Belgrade and Novi Sad. All lecturers have extensive experience in teaching and active international cooperation with academic partners in Europe. Some special topics will be covered by professors from other relevant institutions or universities.

Proposal prepared by:
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Modules, credits and hours

I BLOCK **Basic (compulsory) modules**	Credits	*Hours* A	*Hours* B	*Hours* C
Ecology and agroecosystems	5	20	30	75
Water and soil as non-renewable natural resources	5	20	30	75
Biodiversity-genetic resources of plant, animal and microorganisms	5	20	30	75
Environmental and natural resource economics	5	20	30	75
Farming and rural systems development	5	20	30	75
Sustainable land use	5	20	30	75
II BLOCK - Optional modules				
Integrated cropping systems	5	20	30	75
Advanced crop production systems	5	20	30	75
Integrated pest management	5	20	30	75
Fruit production and development in sustainable agriculture	5	20	30	75
Grapevine production and development in sustainable agriculture	5	20	30	75
Livestock production systems and development in sustainable agriculture	5	20	30	75
Animal health, behaviour and welfare in sustainable livestock production systems	5	20	30	75
Applied animal nutrition in sustainable livestock production system	5	20	30	75
Integration of aquaculture in agricultural farming systems	5	20	30	75
Safe food sustainable production and processing	5	20	30	75
Farming systems	5	20	30	75
Project management and evaluation	5	20	30	75
III BLOCK				
FINAL ASSIGNMENT	15	30	-	345

Note:

For **Lectures 1 credit** consists in **25 hours** divided as follow:
- A = 4 hours for lectures “face to face”
- B = 6 hours for e-learning
- C= 15 hours for individual study

For **Final Assignment** 1 credit consists in 25 hours divided as follow:
- A = 2 hours with tutor
- C= 23 hours individual work/study