Building Capacity of Serbian Agricultural Education to Link with Society

Coordinator:
University of Belgrade
Faculty of Agriculture

Izgradnja kapaciteta srpskog obrazovanja u oblasti poljoprivrede radi povezivanja sa društvom

Koordinator:
Univerzitet u Beogradu
Poljoprivredni fakultet

COURSE REGISTRATION FORM

Teacher
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University
University of Novi Sad, Faculty of Agriculture

Course
Drip irrigation system – selection and design

Target
Agricultural Middle Schools and Agricultural Extension Service

Type
blended

Duration
2 days - 16 hours

Description
Irrigation is the main agro-technical activity that has to be undertaken in our area so that maximum profit and yields can be achieved. Only 2% of arable land is irrigated in Serbia and they are mostly small plots of 0.5 to 2 ha. The Republic of Serbia has identified this problem and it offers a grant amounting to 30-45%. The purpose of organizing the course on the selection and designing of the drip irrigation system is to introduce a large number of new potential users with the advantages of using the system and possibilities of its application.

Contents

Topic and training units are as follows:
1. Importance of irrigation in agricultural production,
2. Advantages and disadvantages of certain irrigation methods,
3. Selection of the most suitable irrigation system with respect to the crops,
4. Selection of water source and plant for water supply,
5. Selection of irrigation system elements,
6. Selection of drip laterals,
7. Automatic control of irrigation system,
8. Setting up of the irrigation system,
9. Independent designing (selection of water supply system and elements of irrigation system) and drawing up the list of equipment as well as setting the price for the irrigation system

Objectives
Introducing AMS and PSSS with the drip irrigation system. By attending the course, the target groups will broaden their knowledge that they will be able to transfer effectively to their students, that is, agricultural producers. The objective of the course is teaching about how to choose elements and design drip irrigation system independently so that areas under irrigation can be expanded.

Activities
The course is designed to last for two days. Traditional teaching together with application of AUN method is planned for the first day of the course. The second day is planned in such a way that participants can use Moodle platform to access online contents via their computers and take all instruction
The task of the participants is to do a test using the Moodle platform. The purpose of the test is for the participants to demonstrate their knowledge about the names and selection of elements of irrigation system. Upon successful completion of the test, every participant solves a specific task (for the given plot, crop ...) relating to designing of water flow and selection of elements for the irrigation system. The specific problem is solved in writing using Excel, by using instruction material and tables of elements of the irrigation system within the Moodle platform. Every participant solves his/her own assignment and explains orally his/her technical solution in front of the group. Oral discussions on possible improvements in technical solution for the irrigation system will be held within the group together with suggesting technical solutions. Providing successful solution to the set assignment (determination of the list of elements forming the specific irrigation system) represents the outcome of the course and proof of having passed the course.

Materials

The room for practical work (classroom, video beam) with seating capacity of minimum 20 seats, board and chalks, paper of B0 format, markers.

Elements of the irrigation system: joints, PE pipes, drip tapes, filters, pressure regulators, etc.

For traditional teaching: PPT presentation, instruction material, standard tasks for designing within the Moodle platform.

For the online course within the Moodle platform with computer for every participant: the participants have to be equipped with a computer and they have to be able to access Moodle platform online.