**Building Capacity
of Serbian Agricultural
Education
to Link with Society**

**Izgradnja kapaciteta
srpskog obrazovanja
u oblasti poljoprivrede
radi povezivanja sa društvom**

**Coordinator:
University of Belgrade
Faculty of Agriculture**

**Koordinator:
Univerzitet u Beogradu
Poljoprivredni fakultet**

COURSE REGISTRATION FORM

Teacher	Dušan Marković
University	University of Kragujevac, Faculty of Agronomy in Čačak
Course	Application of the spreadsheet calculations in agriculture
Target	Agricultural Extension Service
Type	blended
Duration	2 days - 16 hours

Description	Many areas of agriculture often require certain calculations as support in planning activities. With the development of information technologies, there are software packages that offer the necessary calculations to users in an efficient and easy way. But software programs are usually implemented for a particular purpose and they are commercial, which requires additional funds for their use. It is understood that advisers already have knowledge about their field of work and they need a means to perform calculations faster and automatically according to the specified tasks and custom requirements. The purpose of the course is the mastering and use of spreadsheet calculations in effective solving various agriculture demands.

Contents	Implement computation in the field of agriculture by spreadsheet calculations with automatically obtaining results (Excel or Writer). Renewals of previous acquired knowledge and getting new skills to use computers in solving various computational problems. Course contained detailed introduction to the program tabular structure and usage function in forming more complex computations. Then, program application in specific case to obtain optimal values of complete feed for domestic animals nutrition and analysis of these results.

Objectives	1. Participants would be familiar with using spreadsheets functions and advantages in performing automatic calculations. 2. Encouraging participants to recognize benefits of using spreadsheets for more efficiently solving problems which require calculations. 3. Training participants to apply their skill in solving specific working tasks such as calculating mixture for feeding domestic animals.

Activities	Validation of participants acquired knowledge in the previously attended agriculture courses. Check their level of competence to work on a computer with a spreadsheet bases. In the first stage of the activities, participants would be renew their work with program (Excel or Writer), such as entry different data types, formatting cells, introduction to usage of basic functions. Also they should be

familiar with the guidance for the calculation of feed mixtures and analysis of quality conditions tables for farm animal nutrition. After that, capability of using built-in functions on tabular data would be presented to course participants and function application for solving a particular problem. Participants independently solve small pre-prepared examples in order to understand the benefits of using automatic calculation. Then they are considering practical case (case study) for the calculation of the mixture for feeding domestic animals. After forming calculation it would be apply to different requirements according to the selected animal, or respectively to the expected structure of the mixture. At the end of the course there is a final test where it is necessary to fulfill the condition of 70% of correct answers required for completions of the course, if the student has achieved score 85% to 95% he is very good or excellent for score over 95%.

Materials	Course materials require computers with Internet access, tables of nutrients chemical composition and tables of quality conditions of complete mixture for farm animals' nutrition.