



COURSE REGISTRATION FORM

Teacher	Milena Savić
University	University of Belgrade, Faculty of Agriculture
Course	Food Microbiology
Target	Agricultural Middle Schools
Type	blended
Duration	2 days - 16 hours

Description	Microorganisms play an important role in the food production. Also, the main competitor in the food production, consumption, distribution and storage and also foodborne disease agents are microbes. The course should enable high school teachers to improve specific skills of organizing classes and encourage them to introduce an online and interactive teaching methods. The course should also help teachers to renew and to supplement their knowledge in the field of food microbiology.
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Contents	<ol style="list-style-type: none">1. Sources and importance of microorganisms in food2. Defining the dominant groups of microorganisms in food3. Characteristics of the dominant groups of microorganisms in food4. Factors affecting the growth of microorganisms in food5. The products of metabolism of microorganisms in food
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Objectives	<ol style="list-style-type: none">1. Systematization of the acquired knowledge of participants in the field of food microbiology, which can serve as a model in their work with students.2. Supplementing knowledge and skills of participants about how to create tests online, vocabulary with tasks in the field of food microbiology with examples, training the use of Moodle. Developing the ability of participants to find the necessary information.3. Development of the ability of participants to consolidate acquired knowledge in various fields of food microbiology through test making and solving problems.4. Contribution to the development of the ability of participants to apply the acquired knowledge in the field of food microbiology in the new situations, creating scenarios5. Presentation of the news, statistics and trends in the field of food microbiology which can help to the participants in their own teaching.
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Activities	Activities during the first day - The course participants organized in groups create online dictionaries of the most important words in the field of food microbiology. Mutual, groups
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compare lists of terms, supplement and comment dictionaries, argue the importance of the selected terms. The activity ends with making the final list of common terms that will enter into a common online dictionary.

- Participants in teams (from each group one participant) associate terms from different themes for different microorganisms (microorganism with growth factors and products of metabolism). Participants are thinking about how to present concepts (conceptual maps, illustrations, drawings, diagrams etc.). Participants present the results and teams discuss and argue the results.
- The course participants further practice the application of knowledge through a combination of different factors and predicting the most risky or the most favorable factors for the presence of certain groups of microorganisms in food. One team gives the other team tasks in the form of scenarios. Every team presents the conclusions, discuss and evaluate the work of other teams.
- Lecturer at the end of the day gives the Power Point presentation on the latest trends in the field of food microbiology and global epidemic data with statistics. The participants share their observations during the presentation.

Activities during the second day

- The course participants organized in groups create tests of knowledge online (they choose the form of the test and the lecturer helps them). They create test with the tasks of the practical application of knowledge, which should anticipate the risks or to identify the causes of food spoilage / potential benefits of microorganisms in the food using dictionaries. One group solves the test of the other, and then discuss the results and test form.
- Lecturer gives to the teams different scenarios - actual cases of food poisoning in the last 5 years. Participants should solve scenarios using dictionaries, predicting possible poisoning prevention according to the microorganism growth factors. Every team present the conclusions, discuss and evaluate the work of other teams.

Materials

The printed material, computers with internet access for all course participants, blackboard, video-beam, large-format papers, markers, notebooks and pens for all participants.