

Course Unit Descriptor

Study Programme: Field and Vegetable Crops			
Course Unit Title: Field crops I			
Course Unit Code: 3ORT7O25			
Name of Lecturer(s): Full Professor Jovan Crnobarac, contributors: Associate Professor Dragana Latković			
Type and Level of Studies: Bachelor Studies			
Course Status (compulsory/elective): Compulsory			
Semester (winter/summer): Winter			
Language of instruction: English			
Mode of course unit delivery (face-to-face/distance learning): face to face			
Number of ECTS Allocated: 6			
Prerequisites: General field crops, Soil science and fertilizers, Agricultural engineering			
Course Aims: The aim of the course is that students learn how to in environment of Serbia or similar, can achieve higher and stable yields of good quality with satisfactory profitability and conservation of agro ecosystems. Next main field crops will be studied: wheat, barley, corn, beans, soybeans, peas.			
Learning Outcomes: After completion of lectures and exercises student will be informed with the basic elements of growing technology of field crops. After passing the exam, the candidate will be qualified to lead the production of field crops and to be successful in this production; and will be trained to combine the knowledge, ability and skills with the given environmental conditions.			
Syllabus: <i>Theory</i> For each plant species will be studied following chapters: 1) General characteristics: economic importance, area and yields in the world and in our country, geographic distribution, origin and growing history of the crop. 2) Biological characteristics and requirements for growing conditions. 3) Production technology: crop rotation (rotation and convenience in the crop rotation), tillage; seedbed preparation; fertilization (manner, time and amount of nutrients), sowing (choice of varieties and/or hybrids, seed quality, seed preparation for sowing, time and method of sowing, sowing rate or crop density which need to be achieved with emphasis on varietal specificity); crop care (protection against weeds, pests and diseases, eventually nitrogen top dressing, inter-row cultivation and specific measures of care); harvest (physiological and technological maturity, time and method of harvesting, after harvest processing and storage). In the context of growing technology, special attention will be paid to the quality of the applied measures and cost-effectiveness. <i>Practical work</i> On the exercises, students will be familiar with the morphology and ongoing stages of growth and development (phenological phases and stages of organogenesis) of the above crops. Within exercises will be presented fresh and dry plant material and photos of plants. The growth stages and looks of plants, students will be able to see in the Faculty collection garden and at commercial farm in field exercises which will be performed 2-3 times per semester.			
Required Reading: John H. Martin, Richard P. Waldren, David L. Stamp: Principles of Field Crop Production, Pearson Education Inc., Upper Saddle River, New Jersey, Columbus, Ohio, USA, 2006. Robert G. Hoelt, Emerson D. Nafziger, Richard R. Johnson and Samuel R. Aldrich: Modern corn and soybean production, MCSP Publications; 1 st edition, 2000. Internet and digital sources: Thematic international journals and lecture notes of professor.			
Weekly Contact Hours: 8	Lectures: 60	Practical work: 60	
Teaching Methods: Lectures and students group work and consultations.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	30
Preliminary exam(s)	25	oral exam	40