

Study program: Ecological agriculture			
Type and level of study: Master academic studies			
Course Title: Technology of the production and processing of bee products			
Professors: Dr. Sladan B. Rašić, Assistant professor			
Status: Optional 2, semester II			
ECTS: 6			
Prerequisite: None			
The goal of the course The course should enable students to acquire knowledge about all bee products: honey, pollen, royal jelly, propolis, bee venom, wax, their obtaining and processing methods, the most modern methods of storing and processing as well as fostering quality of bee products and the ecological aspects of modern beekeeping. The course also enables students to acquire knowledge in the field of organic production in beekeeping, learn to distinguish organic from non-organic bee products, master methods for the production of organic honey, organic royal jelly, organic pollen, organic propolis and organic wax and acquire the necessary knowledge of the permitted packaging and on the recommended storage conditions of organically produced bee products.			
The outcome of the course The students should demonstrate knowledge and understanding of the ways of production of bee products, master the knowledge in the field of production technology and proper storage and handling of bee products. Also, the students should acquire knowledge in the field of conventional, organic and organic production of bee products, and master the methods of production of organic honey, organic identification details, organic propolis and organic wax, methods of storage and packaging of the obtained organic bee products.			
Syllabus <i>Theoretical study</i> - The course is designed so that the first part of the process include production and obtaining of all bee products in the hive. The second part is processed in the area of the seizure, storage and packaging of bee products, with special emphasis on packaging and packaging decrystallization and equalization product. The third part provided for the study of technological properties of bee products and the study of critical points in the beekeeping production with special emphasis on the application of good beekeeping practices. About a quarter of the section deals with the organic production of bee products, technology of organic honey and other bee products, methods of storage, warehousing and packaging, and manner of their correct use. Also, special attention is paid to the economic effect of increasing the production of organic products in beekeeping <i>Practical lessons</i> - Theoretical and practical introduction to beekeeping technologies and different ways of obtaining bee products; introduction to quality, storage, decrystallization, processing and packaging bee products conventionally and in organic production.			
Literature Crane Eva (1979): Honey a Comprehensive Survey. Heinemann, London. Conrad, R. (2007): Natural Beekeeping: Organic Approaches to Modern Apiculture, Acres U.S.A. Wang An and Peng Wen Jun (2011): Books ecological beekeeping ecological farming techniques, China Agricultural Pub Mader, E., Spivak, M., Evans, E. (2010): Managing Alternative Pollinators, Ithaka, NewYork.			
Number of lectures: 4			Other Classes
Lectures: 2	Practices: 2	Other forms of teaching: Student research work:	
Teaching methods: Oral presentation, presentations, demonstrative-illustrative method, laboratory exercises, seminars			
Score (maximum 100 points)			
Pre-exam commitments	Points	Final exam	Points
Activity during lectures	10	Written exam	20
Practical classes	10	Oral examination	30
Preliminary exam	10		
Seminars	20		
<i>Total</i>	50		50