

Discipline	<i>VITICULTURE, PART 1</i> code: 24 summer semester		
Specialty	AGRONOMY		
ECTS credits: 5	Form of assessment: Exam		
Lecturer	Prof. Miroslav Ivanov, PhD Room: NUK 317a Phone: +359 52 385 725 E-mail: miro_ivanov56@abv.bg		
Department	PLANT PRODUCTION		
Faculty	<i>FACULTY OF MECHANICAL ENGINEERING AND TECHNOLOGIES</i>		
<p>Annotation:</p> <p>The Viticulture as an educational and scientific discipline has as its object the cultural vine with its environmental requirements and the methods for regulating its growth and fruit production with a view to obtaining high yields of quality grapes. Contemporary viticulture is based on the achievements in physiology, biochemistry, agrochemistry, soil science, general agriculture, mechanization, organization and economics of agriculture and other basic sciences, and specifies their achievements directly to the grapevine, revealing its specific features depending on ecological and agro-technical conditions. The final aim of the curriculum is to acquaint students with the basic botanical principles and biological characteristics of the vine, to acquire the necessary theoretical knowledge and practical skills in breeding the vine and in the creation and cultivation of vine plantations.</p>			
CONTENTS:			
Training Area		Hours lectures	Hours seminar exercises

Status and trends in the development of viticulture in the world. Viticulture in the most important wine-growing countries of the world. Status and trends in the development of viticulture and winemaking in Bulgaria. Biological foundations of fruit growing.	2	
Morphology, anatomy and physiology of the vine plant.	6	
Biological cycles in vine development. Small /annual /cycle. Vegetation period - phenophases. Phenological observations.	2	
Ecology of the vine.	3	
Propagation of the vine. Propagation by seeds. Vegetative propagation. Propagation by taps. Propagation by cuttings. Propagation by mature cuttings. Propagation by grafting. Accelerated propagation of the vine by green cuttings. Accelerated propagation of the vine by the tissue culture method /in vitro/.	2	
Organography of the vine. Morphological features of root, stem, shoot and buds.		4
Anatomical features of the vine: root, stem, shoot and buds.		4
Organography and anatomy of leaf, inflorescence, flower, cluster, grain and seed of the grapevine.		4
Reproduction of the vine.		4
Production of vine planting material.		4
Production of vine planting material.		5
Rooting of grafted stratified cuttings.		3
Extraction, sorting and storage of grafted, rooted vines.		2
TOTAL: 45 h	15	30