

Discipline	Plant Physiological Ecology	code: 49b	winter semester
Specialty	Agronomy		
ECTS credits: 6	Form of assessment: Exam		
Lecturer	Assoc. Prof. Dr. Miglena Drumeva Room 331 Phone: +359 52 385 725 E-mail: m_drumeva@tu-varna.bg m_drumeva@abv.bg.		
Department	Plant Production		
Faculty	Faculty of Manufacturing Engineering and Technology		
<p>Learning objectives:</p> <p>The curriculum is intended for students of a Bachelor's degree program in Agronomy. The course "Plant Physiological Ecology" enables students to acquire a broad understanding of the influence of environmental factors on plant life processes related to their growth and development, root and foliar nutrition, synthesis and accumulation of different substances, especially those of them, which are of economic interest. The main focus of the lecture course is on cultivated plants, explaining the relationships between them and their environment. Students become acquainted with the influence of the environmental factors on the mechanisms of basic physiological processes such as water exchange, photosynthesis, respiration, mineral nutrition, growth and development of plants.</p> <p>The laboratory exercises are directly related to the lecture course and aim to deepen and expand the theoretical knowledge. The development of modern agriculture requires knowledge of the physiological bases of biological phenomena in order to rationally use the environmental factors to guide and regulate plant growth and development, thereby increasing the yield and quality of agricultural products while preserving the environment. The knowledge that the future agronomists will acquire about the nature of the ecological management of physiological processes in plants is directly related to the other special disciplines - plant growing, breeding, soil science, melioration, agrochemistry, plant protection, agroecology, etc.</p>			

CONTENTS:		
Training Area	Hours lectures	Hours seminar exercises
Introduction to the environmental factors and their impact on the development and productivity of crop plants.	2	2
Edaphic factors.	3	3
Climatic factors.	7	7
Biotic factors.	3	3
TOTAL: 30 h	15	15