Study Programme: Agricultural engineering and information systems

Course Unit Title: TRANSPORT AND LOGISTICS

Course Unit Code: 19.PTI033

Name of Lecturer(s): Prof. Lazar Savin, PhD

Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES

Course Status (compulsory/elective): Compulsory

Semester (winter/summer): Summer

Language of instruction: Serbian

Mode of course unit delivery (face-to-face/distance learning): Face to face

Number of ECTS Allocated: 3

Prerequisites: No

Course Aims:

The aim of the course is to acquaint students with the basic constructions of transporting means of transport in agriculture, adjustment and economical use and the method of choice according to the purpose and conditions of application. Then to be able to develop, design, as well as logistics in the transport process.

Learning Outcomes:

After taking the course, the student acquires knowledge and skills that enable him to:

- essential understanding of the technical basis of means of transport in agriculture,
- development and design of means of transport in agriculture,
- correct choice according to the purpose, sowing structure and conditions of use,
- proper handling, maintenance and storage and economical and ecological use of means of transport in agriculture,
- legal regulations and procedures for the import of transporting means.

Syllabus:

Theory

Significance and goal of transport in agriculture. Definition and structure of the transport process. Loads in agricultural transport. Mobile transport unit. Tractor transport unit. Driving resistance and utilization of tractor traction. Trailers. Trailer brakes, trailer load storage, load unloading system, trailer control devices and other trailer equipment. Application of trucks in agriculture. Container transport in agriculture, palletizing in agriculture. Loading and reloading means of transport in agriculture. Tractor and self-propelled loaders, conveyors and elevators. Simple handling transhipment means. Legal regulations on import and homologation of transporting means.

Practice

The structure of the transport process in agriculture. Tractor transport units. The action of force on a single - and two-axle trailer. Trailer coupling systems. Trailer brakes. Loading and reloading means of transport in agriculture (demonstration and tasks). Calculation of basic parameters of conveyors and elevators, productivity and power for operation.

Required Reading:

Weekly Contact Hours: 7 Lectures: 4 Practical work: 3

Teaching Methods:

Lectures and Practical classes, Consultations if needed.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	
Test	0	oral exam	50
Seminar papers	40		
Colloquium	0		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.