

COURSE GUIDE – short form

Academic year 2015- 2016

Course name ¹	Machines for soil tillage, sowing and plant protection					Course code	MLS310. DS DI.		
Course type ²	DS	Category ³	DI	Year of study	III	Semester	6	Number of credit points	5

Faculty	FACULTY OF MECHANICS				Number of teaching and learning hours ⁴				
Field	Mechanical Engineering				Total	L	T	LB	P IS
Specialization	Machines for Agriculture and Food Industry				70	42	-	28	- -

Pre-requisites from the curriculum ⁵	Compulsory	
	Recommended	Strength of Materials, Machinery parts, Mechanism, Hidraulic and Pneumatic Machines

General objective ⁶	- Basic knowledge concerning destination, construction and functioning of agricultural machines;; - Basic elements concerning the design of soil tillage, sowing plants, agricultural cultures entertainment and plant protection machines and equipments.	
Specific objectives ⁷	- Agricultural soils, properties, principal means o protection and good use; -Soil tillage machines (ploughs, disk harrows, cultivators, rototilers); - Machines for sowing an transplanting vegetables; - Machines and installations for plant protection and fight against plant diseases;	• • • ...
Course description ⁸	1.Properties of agricultural soils. 2.Ploughs, classification, fundamentals for construction, functionability. . 3. Disk harrows, classification, construction, functionability. Cultivators and combined machines for tillage. 4. Rototillers. 5.Machines for sowing and transplanting vegetables. 6. Combined machines for soil tillage and sowing for a single pass of the agricultural aggregate on soil. 7. Notions about the transmissions of the sowing machines. 8. Machines for planting potatoes. 9.Machines for administration fertilizers and amendaments.11.Macines for the pest control for culture plants.12. Machines for administration herbicides.	

Assessment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester		Week 9	20 %
	Activity during tutorials/laboratory works/projects/practical work		14 laboratory works	30%
	Assignments			%
Final assessment	Final assessment form ¹¹			50%
	Examination procedures and conditions: 1. ; tasks ; discussions on machines, costruction, principle of operation ; 40 % 2. ; tasks ; the theory of the working process of the machine ; percent of the final grade; 10 % 3.			

Course organizer	Vasile CRĂCIUN, Ph.D. Professor	
Teaching assistants	Alina DUMITRAȘCU, Ph.D., Assistant	

¹ Course name from the curriculum

² DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

³ DI – imposed, DO –optional, DL – facultative (from the curriculum)

⁴ Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)

⁵ According to 4.1 – Pre-requisites - from the Course guide – extended form

⁶ According to 7.1 from the Course guide – extended form

⁷ According to 7.2 from the Course guide – extended form

⁸ Short description of the course, according to point 8 from the Course guide – extended form

⁹ For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

¹⁰ A minimum grade might be imposed for some assessment stages

¹¹ Exam or colloquium