

	University of East Sarajevo Faculty of Agriculture					
	Study program: Forestry					
	Undergraduate studies	III year				
Full name of the subject	FOREST UTILIZATION					
Chair	Forestry					
Code of the subject	Subject status	Semester	ECTS			
I-III-3-29o	mandatory	V	8			
Teacher (s)	Dr. Marko Gutalj, assistant professor					
Associate (s)	M.Sc. Boban Miletić, senior teaching assistant					
Hours / teaching load (weekly)		Individual student workload (in semester, hours)		Student workload coefficient S₀¹		
L	AC	LC	L	AC	LC	S₀
4	3	0	4*15*1,7	3*15*1,7	0*15*1,7	1,7
total teaching load (in hours, semester) 4*15 + 3*15 + 0*15 =105			total student workload (in hours, semester) 4*15*1,7 + 3*15*1,7 + 0*15*1,7 = 178,5			
Total subject load (teaching + student): 105 + 178.5 = 283.5 hours per semester						
Learning outcomes	<ol style="list-style-type: none"> 1. Organizing and managing technological processes of forest utilization 2. Recording of work process and calculation of the norm time in forest utilization 3. Landing site positioning and design of the optimal secondary network of forest roads 4. Development of operational (contractor) production plans with reference to the cost-effectiveness and environmental justification of works that such plans imply. 					
Conditionality	There are no conditions for exam registering and listening to the subject					
Teaching methods	Classes are conducted in the form of lectures, auditory (numerical) exercises, tests, colloquia, consultations					
Course content by weeks	<ol style="list-style-type: none"> 1. Introduction to teaching material. Subject of study, significance and perspectives of forest utilization 2. Restrictions in forest utilization. Institutional constraints. Constraints related to the general useful functions of the forest and the requirements of silviculture. Restrictions on working conditions. Concepts of forest ecosystem management from the aspect of forest utilization. 3. Assumptions and laws of successful application of technological processes of forest utilization. Motives and possibilities of application of mechanization. Technological calculation of mechanization labor costs in forest utilization 4. General characteristics and requirements for work in forest utilization. Workers in technological processes of forest utilization and workplace requirements 5. Test 1 6. Technologies and technological processes in forest utilization. Technological processes in conventional felling and production of forest wood assortments. Means and techniques of work 7. Technological processes in modern felling and production of forest wood assortments based on the use of mechanized aggregates. Conditions and effects of application of mechanized aggregates in felling and production of forest wood products. 8. Technologies for making wood assortments in the landing sites. Landing sites on the tractor road. Landing sites next to the truck road. Central mechanized landing sites. 9. Concepts and definitions of tree skidding. Tree skidding and forest damage. Influential factors of cargo and soil that determine the shape and size of damage to the soil due to the tree skidding 10. Secondary road network in the function of tree skidding. Animal skidding tracks. Tractor tracks. Cable yarder lines. Forest landing sites 11. Test 2 12. Problems, definitions, phases and general indicators of transport. Mode and means of transport. Costs of transport. Choice of means of transport. 13. Optimal network density of skid trails and other road communications 					

	14. Forest landing sites, loading and unloading of wood. 15. Operational (performance) production plans in forest utilization and direct production costs.			
Required literature				
Author (s)	Name of publication, publisher	Year	Pages (from-to)	
Nikolić. S.	Iskorišćavanje šuma, Šumarski fakultet Univerziteta u Beogradu	1991		
Bajić V. & Danilović M.	Praktikum iz iskorišćavanja šuma, Šumarski fakultet Univerziteta u Beogradu	2003		
Supplementary literature				
Author (s)	Name of publication, publisher	Year	Pages (from-to)	
Jokanović N., Tešanović D., Delić M., Topalić V., Forcan S., Samardžija N.	Jedinstvene norme radova u šumarstvu, JPŠ „Srpske šume“	2002		
Obligations, forms of knowledge assessment and assessment	Type of student performance evaluation		Points	Percentage
	Pre-exam obligations			
	attendance at lectures / exercises		5+5	10 %
	Test 1		10	10 %
	Test 2		10	10 %
	Colloquium 1		10	10 %
	Colloquium 2		10	10 %
	Final exam			
Final exam (oral / written)		50	50 %	
TOTAL		100	100 %	
Website				
Validation date				