Faculty of Mechanical Engineering / ROAD TRAFFIC / ORGANISATION AND MANAGEMENT IN TRAFFIC

Course:	ORGANISATION AND MANAGEMENT IN TRAFFIC			
Course ID	**Course status**	**Semester**	**ECTS credits**	**Lessons** (Lessons+Exercises+Laboratory)
11498	Mandatory	6	5	2+2+0
Programs	ROAD TRAFFIC			
Prerequisites	N/A			
Aims	Studying the legality of the process of organizing work, so that on the basis of these laws, with the use of modern methods and techniques, the work is carried out with the greatest effect. The study of the organization of a company as a broader term than the organization of production, which refers to the entire operation of the company, which, in addition to the coordination of production factors, also includes other functions, such as legalities of management, business and development policies, marketing functions, research and development, information connection, organizational transformation of companies, etc. The goals are also for students to master the techniques of forecasting, multi-criteria decision-making, fleet management, calculation of queue parameters, and more.			
Learning outcomes	After the student completes the exam, he will be able to: • Understands the concept of organization, distinguishes between classical and neo-classical organizational structure, • Understands types of organizational structure, • Performs calculations using the AHP mathematical model • Performs calculations in the function of fleet management - He knows linear programming methods			
Lecturer / Teaching assistant	Aleksandar Vujovic			
Methodology	Lectures, exercises, consultations. Practical examples			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	The concept and development of the organization. Types of organizational structure. Science of organization			
I week exercises	The concept and development of the organization. Types of organizational structure. Science of organization			
II week lectures	Development and specificities of organizations in the field of transport. Traffic development strategies. Traffic development strategy in Montenegro - analysis			
II week exercises	Development and specificities of organizations in the field of transport. Traffic development strategies. Traffic development strategy in Montenegro - analysis			
III week lectures	Classical theory of organization (Fayol, Taylor, Weber) - advantages and disadvantages. Practical examples of promotion at the chosen organization. Case analysis from practice.			
III week exercises	Classical theory of organization (Fayol, Taylor, Weber) - advantages and disadvantages. Practical examples of promotion at the chosen organization. Case analysis from practice.			
IV week lectures	Neo-classical theory of organization (communication, participation, motivation). A practical example of analysis in the chosen organization and the direction of improvement			
IV week exercises	Neo-classical theory of organization (communication, participation, motivation). A practical example of analysis in the chosen organization and the direction of improvement			
V week lectures	Types of organizational structures (line, functional, project, network, process...) advantages and disadvantages			
V week exercises	Types of organizational structures (line, functional, project, network, process...) advantages and disadvantages			
VI week lectures	Types of organizations (foreign companies, concerns, partnerships ...). Strategies. Goals. Politics. Missions. Visions. Analysis in the chosen organization.			
VI week exercises	Types of organizations (foreign companies, concerns, partnerships ...). Strategies. Goals. Politics. Missions. Visions. Analysis in the chosen organization.			
VII week lectures	Mathematical models and techniques of multicriteria decision-making and their application in the function of improving organizational structures. Application of the AHP method (Analytical Hierarchy Process) for the needs of choosing the optimal solution of a realistic organizational structure			
VII week exercises	Mathematical models and techniques of multicriteria decision-making and their application in the function of improving organizational structures. Application of the AHP method (Analytical Hierarchy			

	Process) for the needs of choosing the optimal solution of a realistic organizational structure
VIII week lectures	Test I
VIII week exercises	Test I
IX week lectures	Fleet management. Mathematical models. Practical application and analysis at the chosen organization. Case analysis from practice.
IX week exercises	Fleet management. Mathematical models. Practical application and analysis at the chosen organization. Case analysis from practice.
X week lectures	Mathematical models for forecasting – Bazeys formula, Promeethey method. Practical application and analysis at the chosen organization
X week exercises	Mathematical models for forecasting – Bazeys formula, Promeethey method. Practical application and analysis at the chosen organization
XI week lectures	CPM method (critical path method). Practical application and analysis at the chosen organization. PERT method (evaluation and revision method). Practical application and analysis at the chosen organization
XI week exercises	CPM method (critical path method). Practical application and analysis at the chosen organization. PERT method (evaluation and revision method). Practical application and analysis at the chosen organization
XII week lectures	Ergonomic measurements in traffic. Application of equipment for ergonomic measurements in real conditions.
XII week exercises	Ergonomic measurements in traffic. Application of equipment for ergonomic measurements in real conditions.
XIII week lectures	Waiting lines. Single-channel and multi-channel queues. Mathematical calculation of queue parameters. Practical application at the selected organization. Participation of experts from practice.
XIII week exercises	Waiting lines. Single-channel and multi-channel queues. Mathematical calculation of queue parameters. Practical application at the selected organization. Participation of experts from practice.
XIV week lectures	Test II.
XIV week exercises	Test II.
XV week lectures	Remedial Test I and II
XV week exercises	Remedial Test I and II
Student workload	

Per week	**Per semester**
5 credits x 40/30=6 hours and 40 minuts 2 sat(a) theoretical classes 0 sat(a) practical classes 2 excercises **2 hour(s) i 40 minuts** of independent work, including consultations	Classes and final exam: **6 hour(s) i 40 minuts x 16 =106 hour(s) i 40 minuts** Necessary preparation before the beginning of the semester (administration, registration, certification): **6 hour(s) i 40 minuts x 2 =13 hour(s) i 20 minuts** Total workload for the subject: **5 x 30=150 hour(s)** Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) **30 hour(s) i 0 minuts** Workload structure: **106 hour(s) i 40 minuts (cources), 13 hour(s) i 20 minuts (preparation), 30 hour(s) i 0 minuts (additional work)**
Student obligations	Attending lectures and exercises
Consultations	Every working day in office 419
Literature	Prof. dr Vujadin Vešović, Organizacija i menadžment u saobraćaju, Saobraćajni fakultet, Beograd,2002. Prof. dr Miodrag Bulatović, Organizacija saobraćajnih preduzeća,. Skripta u elektronskoj formi, Mašinski fakultet, 2008. Prof. Dr Zdravko Krivokapić, Organizacija i menadžment-Mašinski fakultet Pdgorica, 2008
Examination methods	Activities at classes and exercises 0 - 10 poena Two test 0 - 40 poena Final exams : 0 - 50 poena
Special remarks	
Comment	

Grade:	F	E	D	C	B	A

Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points