

<b>Course:</b> Fundamentals of Logistics			<b>Course designation:</b> L110
<b>Semester:</b>	<b>Lectures + exercises + seminar:</b>	<b>Total:</b>	<b>ECTS credits:</b>
1	2 + 1 + 1	60	7

**Course objective:**  
Acquisition of elementary knowledge of logistics systems and systematic approach to studying logistics.

**Course contents:**  
 Concepts, historical development, importance, types and purpose of logistics. Business logistics, competitive advantage through logistics support, logistics chains, the importance of logistics in business operations.  
 Quality of logistics support (system effectiveness and efficiency).  
 Costs of logistics support in organizational life cycle, and life cycles of services and products.  
 Logistics management (logistics planning, logistics strategies, logistics products).  
 Logistics services (product and services, capacity, waiting-time and distribution channels of services, processing orders and information flows).  
 Integrated logistics in the organization, relations with other departments in the company, forecasts of logistics demands, IL developmental levels and achievements divided by level.  
 Managing supplies (classification of items, economic order quantity, safety stock).  
 Managing materials in the company (distribution models, storage system and associated processes, locations, components and storage processes, internal-transport fundamentals of the movement of materials, packaging).  
 Transport and transport management (types and characteristics of transport, transport regulation, intermodal transportation, selection of transportation and carrier, own and hired transport).  
 Maintenance system as a logistic subsystem, the relationship between the concept, technology and organization of maintenance, quality and optimization of the maintenance system.

<b>Course:</b> Logistics Engineering			<b>Course designation:</b> L220
<b>Semester:</b>	<b>Lectures + exercises + seminar:</b>	<b>Total:</b>	<b>ECTS credits:</b>
2	2 + 1 + 1	60	6

**Course objective:**  
Gaining knowledge of technical systems' effectiveness and integral logistics support for technical systems.

**Course contents:**  
 Basic concepts. Integrated logistics support. Effectiveness of complex technical systems. Life-cycle costs. Reliability and failure models. Repairable systems reliability. Operating availability (readiness). Maintenance suitability. Maintenance models. Normisation and management of spare part supplies. Maintenance management.

<b>Course:</b> Logistic System Management			<b>Course designation:</b> L120
<b>Semester:</b>	<b>Lectures + exercises + seminar:</b>	<b>Total:</b>	<b>ECTS credits:</b>
1	2 + 1 + 1	60	7

**Course objective:**  
Acquisition of knowledge and skills for managing logistics systems and processes.

**Course contents:**  
 Theoretical basis about management - cybernetics. Structure and principles of functioning of a logistic system. Elements of the supply chain system. Basic management functions (planning, organization, coordination, monitoring). Managing the development of logistic activities. Application of science about management of development tasks. Basic characteristics of methods for planning of logistic processes. Forecasting methods and models. Information and communication systems in logistics industry. Risk management in the supply chain. Subsystems.



<b>Course:</b> Logistic System Security			<b>Course designation:</b> L460
<b>Semester:</b>	<b>Lectures + exercises + seminar:</b>	<b>Total:</b>	<b>ECTS credits:</b>
4	2 + 0 + 0	30	5

**Course objective:**  
 Obtaining knowledge on legal basis of security and safety.  
 Adopting safety standards in logistics integral systems.

**Course contents:**  
 Potential hazards and risks in logistics process. Threats to military logistics. Risks for employees, logistics companies and clients. Threats to business information. Evaluation of hazard and protection plan. Protective measures and procedures, establishing safety and security system. Security system management. Security. Technical and physical protection. Business information protection. Hazards and risks in transporting and warehousing goods. Hazards and risks in passenger transportation. Relationship between logistics process and natural environment. Natural and technological accidents and disasters. Transporting hazardous substances per ADR and RID Conventions. Warning signs. Legal regulations on security and protection on Croatia and European Union. Conventions on protection in transportation process. Legal regulations and rule books on protection in Croatia's transportation system. Importance of safety mechanisms in logistics processes. Essence and importance of logistics safety, logistics safety as competitive advantage. Logistics safety as integral part of integrated security system. Security concepts in logistics processes. Logistics security from the aspect of legal prescriptions of certain areas of security and safety. Fire safety. Safety and protection at work. Environmental and ecological protection, impact of ergonomic solutions on logistics security. Safety mechanism in internal transport. Safety measures in warehouse processes, in reloading processes and on transportation routes. Safety mechanisms in logistics documentation: internal control and audit of transportation, warehousing, contractual and other documentation, inspection surveillance. Logistics safety and security. Responsibility of logistics security, ways to monitor implementation of security mechanisms in logistics processes.

<b>Course:</b> Military Logistics			<b>Course designation:</b> L250
<b>Semester:</b>	<b>Lectures + exercises + seminar:</b>	<b>Total:</b>	<b>ECTS credits:</b>
2	2 + 1 + 0	45	6

**Course objective:**  
 Acquiring knowledge in the area of leading, managing, organizing and coordinating processes in the area of military logistics.

**Course contents:**  
 Elementary concepts, role and purpose of military logistics, specific characteristics of branch logistics.  
 History of military logistics: review of key events in military and war history, contemporary trends.  
 Types of military logistics; armament and military equipping processes, technical supplies and maintenance, supply, health, veterinarian, traffic, construction, financial and fire-fighting protection; operational and coordination functions.  
 Staff work in a military organization, logistic department and the functions of leadership and management of logistics.  
 Elementary principles of military logistics;  
 System of planning, programming and budget and implementation of the budget, role and significance of logistics.  
 Logistics in military operations, logistic management in crisis conditions, decision-making and monitoring.  
 Management of operational logistics: deployment of forces, symbols, working logistics map, examples.  
 Logistics in NATO: NATO logistics principles and policies:  
 Planning joint and special military logistics strategies,  
 Planning military equipment and armament,  
 Standards and standard operative procedures in multinational operations.  
 Planning logistics in military and peace operations.  
 Characteristics of logistic system on sample countries and involvement in NATO logistics systems,  
 Logistics reports: personnel planning for military logistics.

<b>Course:</b> Logistic Processes Optimization			<b>Course designation:</b> L230
<b>Semester:</b>	<b>Lectures + exercises + seminar:</b>	<b>Total:</b>	<b>ECTS credits:</b>
2	2 + 1 + 1	60	6
<b>Course objective:</b> Acquire fundamental and learn advanced knowledge about mathematical modelling and optimisation of logistic processes. Acquiring fundamental skills in solving logistic problems by applying software tools.			
<b>Course contents:</b> Elements of logistic processes. Fundamentals of logistic system modelling. Linear programming. Resource allocation problem. Transport issue. Integer programming. Combined integer programming. Distribution network problem. Simulations. Parametric programming and sensibility analysis. Multi-criteria decision-making Software tools.			

<b>Course:</b> Inventory Management			<b>Course designation:</b> L340
<b>Semester:</b>	<b>Lectures + exercises + seminar:</b>	<b>Total:</b>	<b>ECTS credits:</b>
3	2 + 1 + 1	60	6
<b>Course objective:</b> Acquisition of knowledge on warehouse systems and warehouse process management.  Introduction to basic concepts and properties of warehouse processes. Understanding of theoretical determinants, the importance and procedures for managing inventories.			
<b>Course contents:</b> Introduction to inventory and warehouse management. Division of warehouses by ownership, location, construction method, type of goods and warehousing technology. Warehouse operations: reception, storage, commissioning and shipping of goods. Information support for warehouse processes. Warehouse equipment. Methods for calculating warehouse locations. Types of inventories, standards and stock. Inventory management models. Inventory planning, ABC inventory analysis. Determination of inventory value.			

<b>Course:</b> Strategic Management in Logistics			<b>Course designation:</b> L420
<b>Semester:</b>	<b>Lectures + exercises + seminar:</b>	<b>Total:</b>	<b>ECTS credits:</b>
4	2 + 1 + 1	60	5
<b>Course objective:</b> Acquiring fundamental knowledge on management and strategic management in logistics. Acquiring skills in management and application in business operations, especially in logistics.			
<b>Course contents:</b> a) General information on management - Definition of management: concept, tasks and the significance of management, functions and skills - Development of management: early ideas, mature period, contemporary approaches, - Contemporary management challenges: responsibility, information technology, globalization, etc. - Management functions, - Planning; objectives, strategic planning, operative planning, - Organizing: organization in companies, work processes and projects, delegating, authorities, and power; - Management leadership, coordinating: working with people, and situational approach to management; - Project management, - Monitoring, classic monitoring, quality management, other models, decision-making; decision-making process, - Changes management; realizing climate for changes, leading the changes in process b) Strategic management: - Definition and meaning of strategic management, components and model of strategic management, - vision, mission, goals, interested groups, social responsibility, - designing the strategy (internal and external analysis, SWOT analysis, types and selection of strategy), - Strategy implementation (designing organizational structure, integrative and control systems, harmonizing strategy, structure and control, programs, calculations and procedures for implementation), - Policy and power in organizations (sources of policies and power in organizations, influence of policy and power on strategy, managing organizational policies), - Conflicts in organizations (sources of conflicts in organizations, strategic management of conflicts), - Changes in organizations (determining needs for changes, determining hindrances and resistance to changes, introducing changes into organizations, self-learning organization), - Strategic management model, strategic approach to the development of a logistics plan.			