

NATIONAL AVIATION UNIVERSITY
FACULTY OF TRANSPORT, MANAGEMENT AND LOGISTICS
LOGISTICS DEPARTMENT

METHODOLOGICAL RECOMMENDATIONS FOR SELF-STUDY

on the subject « AVIATION MANAGEMENT »

Educational degree: «Bachelor»
Educational Professional Program: “Aviation Logistics”
Field of study: 07 “Management and Administration”
Specialty: 073 “Management”

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Acting Head of the Department

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TOPIC 1: Evolution of the scientific foundations of management

Questions (tasks) for self-study:

1. Basic definitions of regulation and management.
2. An integrated system of effective logistics management, supply objects, and subjects of logistics activity.
3. Aviation logistics management as an integrated system of administration and interaction of business entities of air transport.
4. Features and main directions of effective logistics management of aviation companies.
5. Criteria of air transport activity, aviation logistics and criteria of effective logistics management.

List of references:

1. Кулик В.А., Григорак М.Ю., Костюченко Л.В. Логістичний менеджмент: навч. посібник. К.: НАУ, 2012. 260 с.
2. What Are the Four Principles of Taylor's Scientific Management? URL: <https://byjus.com/question-answer/what-are-the-four-principles-of-taylor-scientific-management/>
3. Human Relations Approach - e-PG Pathshala. URL: https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/S000030PU/P000179/M016469/ET/146588993819et.pdf
4. George Elton Mayo: The Father of Human Resource Management. URL: <https://www.linkedin.com/pulse/george-elton-mayothe-father-human-resource-management-sarita-menon>
5. What Are the 14 Principles of Management by Henri Fayol? URL: <https://www.simplilearn.com/principles-of-management-by-henri-fayol-article>
6. Four Ways to Implement Peter Drucker's Theory of Management. URL: <https://www.businessnewsdaily.com/10634-peter-drucker-management-theory.html>
7. Corporate governance URL: <https://bbamantra.com/corporate-governance/>
8. 19 Principles of Logistics Management with Example. URL: <https://www.googleusercontent.com/principles-of-logistics-management/>

Questions:

1. What are the principles of Taylor's scientific management? Explain them.
2. What are the techniques of scientific management according to F.W. Taylor? Explain them
3. What is the essence of the theory of human relations in management by E. Mayo?
4. What are the principles of management by A. Fayol? Explain them
5. What is the essence of the theory of rational management by P. Drucker?
6. What are the prerequisites for corporate governance?
7. What are the prerequisites for logistics management?
8. What are the basic principles of logistics management?

Tests:

Who developed a management theory that advocates the scientific study of tasks and the workers responsible for their performance?

by Frederick Winslow Taylor

by George Elton Mayo

by Henri Fayol

by Peter F. Drucker

by Michael Porter

Who developed a management theory that states that employees are motivated far more by relational factors such as attention and camaraderie than by monetary rewards or environmental factors, such as lighting, humidity and more?

by Frederick Winslow Taylor

by George Elton Mayo

by Henri Fayol

by Peter F. Drucker

by Michael Porter

Who developed a management theory that emphasizes formal structures, clear roles, and efficient coordination to enhance productivity?

by Frederick Winslow Taylor

by George Elton Mayo

by Henri Fayol

by Peter F. Drucker

by Michael Porter

Who developed a management theory that lies the concepts of decentralization, knowledge work (in fact, he coined the term “knowledge worker”, management by objectives (MBO), and the SMART goal method?

by Frederick Winslow Taylor

by George Elton Mayo

by Henri Fayol

by Peter F. Drucker

by Michael Porter

Who developed the concept of value chain analysis?

by Frederick Winslow Taylor

by George Elton Mayo

by Henri Fayol

by Peter F. Drucker

by Michael Porter

TOPIC 2: The essence, tasks and features of aviation management as an air transport management system

Questions (tasks) for self-study:

1. Basic definitions of regulation and management.
2. An integrated system of effective logistics management, supply objects, and subjects of logistics activity.
3. Aviation logistics management as an integrated system of administration and interaction of business entities of air transport.
4. Features and main directions of effective logistics management of aviation companies.
5. Criteria of air transport activity, aviation logistics and criteria of effective logistics management.

List of reference:

1. Кулик В.А., Григорак М.Ю., Костюченко Л.В. Логістичний менеджмент: навч. посібник. К.: НАУ, 2012. 260 с.
2. The Ultimate Guide to Regulatory Management. URL: <https://www.industries.veeva.com/ultimate-guide-to-regulatory-management>.
3. Basic Metrics of Air Service. URL: <https://crp.trb.org/acrpwebresource12/measuring-air-service-and-regional-economic-activity/basic-metrics-of-air-service/>

Question:

1. What is Regulatory Management?
2. What is Governance?
3. What is Management?
4. What does integrated logistics management improve?
5. What are the supply objects in logistics activities?
6. What are the subjects of logistics activities in global logistics?
7. What is aviation logistics governance?
8. What is aviation logistics management?
9. What is the purpose of aviation logistics management?
10. What is the task of aviation logistics management?
11. What are features of Logistics Management for aviation companies?
12. What is Available seat miles for Commercial Passenger Airline Activity?
13. What is Capacity for Commercial Passenger Airline Activity?
14. What is Domestic destinations served for Commercial Passenger Airline Activity?
15. What is Revenue passenger miles for Commercial Passenger Airline Activity?
16. What is Air freight for Commercial Cargo Airline Activity?
17. What is Express freight for Commercial Cargo Airline Activity?
18. What is Tons shipped for Commercial Cargo Airline Activity?

Tests:

What is a set of policies, processes, controls and tools employed by an organization to comply with local and/or global regulatory policies, laws and standards?

Regulatory Management

Governance

Management

What is a purposeful actions regarding the process, object or system to preserve its stability or transition from one state to another in accordance with established goals?

Regulatory Management

Governance

Management

What is the science of managing a modern enterprise, the main content of which is a complex of scientific principles, methods of stimulation and organizational levers of influence on people's actions, the use of various resources in order to achieve strategic and tactical goals of the enterprise?

Regulatory Management

Governance

Management

What is the generalized name for any product of material and immaterial form that requires timely delivery from the place of its origin to the point of consumption of ordered goods, materials, information, finance, personnel, technology, work, operations, ideas, innovations, necessary to society and specific consumers in logistics activities?

The supply objects in logistics activities

The subjects of logistics

The logistics management

The integrated system of logistics

What is the generalized name for any administrative bodies of the objects of logistics management, which are guided by the recommendations of international logistics organizations on partner interaction of economic entities of the global logistics flow and the terms of partner contracts?

The supply objects in logistics activities

The subjects of logistics

The logistics management

The integrated system of logistics

What is a system of actions and decisions for managing the transitions of flow processes in the aviation logistics supply chain?

Aviation logistics governance

Aviation logistics management

Logistics management

Management

What is an integrated system of administration and partnership of interacting business entities of the aviation logistics supply chain?

Aviation logistics governance
Aviation logistics management
Logistics management
Management

What critical area of management in the aviation industry affects the availability, cost, and safety of aircraft parts and services?

Inventory Management
Air Transportation Planning
Air Terminal Management
Air Demand Forecasting and Planning

What is the process of looking at the current state of air transportation in the region, designing for future air transportation needs, and combining all of that with the elements of budgets, goals and policies?

Inventory Management
Air Transportation Planning
Air Terminal Management
Air Demand Forecasting and Planning

What includes optimizing the efficiency and effectiveness of passenger and cargo terminals in air transport in order to increase profitability?

Inventory Management
Air Transportation Planning
Air Terminal Management
Air Demand Forecasting and Planning

What describes the business processes and functions that are deployed by companies involved at all stages of the air service delivery chain to achieve corporate objectives with the optimum use of available resources?

Air Transport Management
Air Terminal Management
Air Demand Forecasting and Planning
Air Traffic Management

What includes economic, regulatory and performance aspects as well as the key factors of network planning and airline scheduling?

Air Transport Management
Air Terminal Management
Air Demand Forecasting and Planning
Air Traffic Management

What is a measure of capacity calculated as the number of seats available multiplied by the distance traveled?

Available seat miles

Revenue passenger miles

Tons shipped

Passengers per day each way

What is a common demand measure of Origin & Destination passengers in the form of one-way directional passengers per day?

Available seat miles

Revenue passenger miles

Tons shipped

Passengers per day each way

What is a measure of traffic demand calculated as the number of revenue-paying passengers carried multiplied by the distance traveled?

Available seat miles

Revenue passenger miles

Tons shipped

Passengers per day each way

What is the total weight of an entire shipment reported in pounds; pounds are then converted to short-tons and displayed in thousands?

Available seat miles

Revenue passenger miles

Tons shipped

Passengers per day each way

TOPIC 3: Theoretical and methodological foundations of aviation logistics management

Questions (tasks) for self-study:

1. Basic regulations, standards and rules of regulation of international air transport.
2. Market laws of logistics as a methodological basis for the unity of logistics management.
3. Evolution of logistics management methodology and its main stages: reactive logistics, marketing logistics, strategic and global logistics management.
4. Hierarchy of logistics activities and levels of logistics management: intra-operational, inter-operational, inter-functional, production, corporate, inter-organizational, global logistics management.
5. Logistics mission and logistics goals.
6. Organization and functioning of logistic business processes, networks, chains, flows, systems.

7. Hierarchy and heterarchy of logistics systems management.
8. Organizational and economic mechanisms of effective aviation logistics management.

List of reference:

1. Кулик В.А., Григорак М.Ю., Костюченко Л.В. Логістичний менеджмент: навч. посібник. К.: НАУ, 2012. 260 с.
2. Manual on the regulation of international air transport (Doc 9626). Current edition.
3. What is the most basic goal of logistics management? URL: <https://corlettexpress.com/what-is-the-most-basic-goal-of-logistics-management/>.
4. Logistics processes: key points for optimising your supply chain URL: <https://www.mecalux.com/blog/logistics-processes>

Questions:

1. How is international aviation activity regulated at the national level?
2. How is international aviation activity regulated at the bilateral level?
3. How is international aviation activity regulated at the multilateral level?
4. What are the main market laws of logistics?
5. What are the stages of evolution of logistics management?
6. Describe levels of logistics management.
7. What are the goals of logistics management?

Tests:

What regulation is regulation undertaken by a State within its territory in its exercise of sovereignty over that territory and the airspace above it?

National regulation

Bilateral regulation

Multilateral regulation

What regulation is regulation undertaken jointly by two parties, most typically by two States, although one or both parties might also be a group of States, a supra-State?

National regulation

Bilateral regulation

Multilateral regulation

What regulation is regulation undertaken jointly by three or more States, within the framework of an international organization and/or a multilateral treaty or agreement, or as a separate specific activity, and may be broadly construed to include relevant regulatory processes and structures, outcomes or output written as treaties or other agreements, resolutions, decisions, directives, or regulations, as well as the observations, conclusions, guidance and discussions of multinational bodies, both intergovernmental and non-governmental?

National regulation

Bilateral regulation
Multilateral regulation

What type of consultation typically involves meetings of multi-person delegations led by designated chairpersons, each having appropriate delegated power?

Formal consultation
Informal consultation
Negotiation

What type of consultation may involve solely written, solely oral, or a combination of written and oral communication?

Formal consultation
Informal consultation
Negotiation

What type of consultation is a consultation, usually a formal one, which has become (or which, from the beginning, was intended to be) a process of bargaining between the parties?

Formal consultation
Informal consultation
Negotiation

TOPIC 4: Scientific principles of aviation logistics management

Questions (tasks) for self-study:

1. Process system as the basic basis of effective logistics management.
2. Main properties of the system. Integrated logistics systems in air transport.
3. Qualities of logistics systems.
4. Complex and integration principle of management.
5. Use of the marketing-behavioral principle of management.
6. Reproducible and optimization management principle.
7. Optimization of investment and resource provision of management decisions based on the use of economic and mathematical methods.
8. Applying of the situational and variable principle.
9. Directive-dynamic principle of management.
10. Use of the functional-cost principle in the system of economic regulation of aviation tariffs and fees.

List of reference:

1. Кулик В.А., Григорак М.Ю., Костюченко Л.В. Логістичний менеджмент: навч. посібник. К.: НАУ, 2012. 260 с.

Questions:

1. What are the specialized areas of ELM?
2. What is the main feature of the system-process management principle?
3. What are the defining qualities (characteristics) of the logistics management system?
4. What is the essence of the complex and integration principle of management?
5. What is the essence of the reproducible and optimization management principle?
6. What is the essence of the situational and variable principle?
7. What is the essence of the directive-dynamic principle of management?
8. What is the essence of the functional-cost principle?

Tests:

What scientific principle of aviation logistics management includes: a) economic-mathematical modeling and optimization of multi-criteria dynamic processes. In logistics systems, the measure of efficiency is the mandatory conditions of partner interaction of the subjects of the aviation chain, under which the overall effect is achieved by varying the criteria by the systems at the local level of individual processes, systems, organizations; b) forecasting of strategic price changes in the markets: passenger, cargo, resource, investment and others for the formation of a financial flow that accompanies the main air passenger or air cargo flow; c) ensuring that revenues from the sale and provision of aviation services exceed the amount of contributions, participating enterprises at all stages of these chains for the purpose of compensating investment contributions and maintaining funds for the expanded reproduction of aviation services; d) the orientation of the air flow to the conditions of optimal use of the main market laws: the law of conformity of the spheres of production and consumption, the law of the efficiency of the scope of work, the law of saving time at all stages of the air chain; e) ensuring unity, optimization of organizational and technical management decisions and economic results; f) creation of aviation chain objects oriented to prospective requirements and future conditions of execution of aviation flow processes?

Reproducible and optimization management principle

The situational and variable principle

Directive-dynamic principle of management

The functional-cost principle

What scientific principle of aviation logistics management includes: a) flexible selection and adjustment of strategies and tactics: survival, stabilization, reengineering, innovative restructuring or complete transformation of the aviation business; b) the use of different management methods depending on the specific situation at each stage of the air chain; c) alternative aviation flows, trajectories of the aviation chain subjects; d) the probabilistic nature of aiming adjustments in the direction of the air flow depending on the time and place of possible current failures and strategic changes?

Reproducible and optimization management principle

The situational and variable principle
Directive-dynamic principle of management
The functional-cost principle

What scientific principle of aviation logistics management includes: a) implementation of the system of the main economic goals of air logistics, in the process of managing the movement and transformation of resources; b) dynamic and coordinated development of individual elements of the aviation system based on the use of methods of analysis, forecasting and synthesis in the management system; c) establishment of cause-and-effect relationships of industrial and economic events in the air chain to justify the expediency and necessity of making management decisions; d) clear regulation of functions, criteria, standards of interaction of participants in aviation processes; formation of target standards of quality and processes; e) the obligation of uninterrupted functioning of the system of strategic and operational-calendar movement planning of the entire aviation chain; f) the presence of a directive and regulatory influence on the aviation processes of the entities of the external environment; g) taking into account the growing pace of scientific and technical progress in the field of forming new needs, the appearance of new products, and the development of new technologies?

Reproducible and optimization management principle
The situational and variable principle
Directive-dynamic principle of management
The functional-cost principle

What scientific principle of aviation logistics management includes: a) formation of the composition and structure of the aviation service in accordance with the real need; b) assessment of necessity, justification (substantiation) of each element of aviation costs; c) cost management in the aviation chain according to the stages of the life cycle of the aviation service and the stages of the management cycle; d) comparative analysis of costs of competing airlines; e) functional and cost analysis of the qualitative and quantitative characteristics of the aviation chain with the aim of their optimization?

Reproducible and optimization management principle
The situational and variable principle
Directive-dynamic principle of management
The functional-cost principle

TOPIC 5: Functions of logistics management of airlines

Questions (tasks) for self-study:

1. The concept of production (operation) functions of logistics.
2. Functions of logistics management.

List of reference:

1. Кулик В.А., Григорак М.Ю., Костюченко Л.В. Логістичний менеджмент: навч. посібник. К.: НАУ, 2012. 260 с.

Questions:

1. What is the essence of the production (operation) functions of logistics?
2. What is the essence of the logistics goal setting function?
3. What is the essence of the logistics planning function?
4. What is the essence of the function of organization of logistics activities?
5. What is the essence of the function of motivation of activities?
6. What is the essence of the function of coordination of the movement of supply objects and interaction of logistics subjects?
7. What is the essence of the controlling function?

Tests:

What function provides for the allocation of aviation goals in accordance with 7 basic criteria of logistics?

The goal-setting function

Function of coordination of the movement of supply objects and interaction of logistics subjects

Function of organization of activities in aviation sphere

Planning function

What function includes sub-functions like organizational structuring and organizational management?

The goal-setting function

Function of coordination of the movement of supply objects and interaction of logistics subjects

Function of organization of activities in aviation sphere

Planning function

What function performs the organizational and coordinating mission of the interaction of logistics processes implemented by individual subjects of the integrated supply chain?

The goal-setting function

Function of coordination of the movement of supply objects and interaction of logistics subjects

Function of organization of activities in aviation sphere

Planning function

What function includes sub-functions like the strategic planning sub-function, the sub-function of tactical planning of aviation activities, the sub-function of operational-calendar planning, the flow scheduling sub-function?

The goal-setting function

Function of coordination of the movement of supply objects and interaction of logistics subjects

Function of organization of activities in aviation sphere

Planning function

What levels of system motivation are in the aviation activity?

aviation sphere of activity

aviation managerial activities

individual labor activity of an executive nature

TOPIC 6: Methods and technologies of aviation logistics management

Questions (tasks) for self-study:

1. Specifics of organizational forms of business process management in logistics systems of airline companies.
2. Classification of logistics management methods.
3. Algorithms of management decisions in logistics activities of airline companies.
4. Peculiarities of managing modern logistics technologies in the management of logistics business processes and business functions.

List of reference:

1. Кулик В.А., Григорак М.Ю., Костюченко Л.В. Логістичний менеджмент: навч. посібник. К.: НАУ, 2012. 260 с.
2. Ready to optimize airline operations? URL: <https://bit.ly/3wv1cnP>
3. ERP for Aviation Industry URL: <https://www.deskera.com/erp-for-aviation/>
4. Flight Booking Process: Structure, Steps, and Key Systems URL: <https://www.altexsoft.com/blog/flight-booking-process-structure-steps-and-key-systems/>
5. Airport information management system suppliers URL: <https://www.airport-technology.com/buyers-guide/airport-information-management-systems/>

Questions:

1. What are the features of aviation logistics management methods?
2. What are the classification of logistics management methods?
3. What are the normative and legal methods?
4. What are the organizational and technological methods?
5. What are the research and analytical methods?
6. What are the economic methods?
7. What are the moral and psychological methods?
8. What are the economic and mathematical methods?
9. What are the algorithm of management decisions in logistics activities of airline companies?

Tests:

What type of logistics management method includes strategic level, tactical level and operational level?

the time of logistical impact method

the method of influence

decision-making method

target orientation method

What type of logistics management method includes direct influence level, indirect influence level and induction influence level?

the time of logistical impact method

the method of influence

decision-making method

target orientation method

What type of logistics management method includes unitary leadership level, collectivism level and collegiality of decisions level?

the time of logistical impact method

the method of influence

decision-making method

target orientation method

Normative and legal aviation logistics management method includes ...

contractual relations and public-private partnership

configuration of the aviation logistics system, chains, flows

identification of aviation logistic business processes

motivation, stimulation, planning, synergy of logistics activities

Organizational and technological aviation logistics management method includes ...

contractual relations and public-private partnership

configuration of the aviation logistics system, chains, flows

identification of aviation logistic business processes

motivation, stimulation, planning, synergy of logistics activities

Research and analytical aviation logistics management method includes ...

contractual relations and public-private partnership

configuration of the aviation logistics system, chains, flows

identification of aviation logistic business processes

motivation, stimulation, planning, synergy of logistics activities

Economical aviation logistics management method includes ...

contractual relations and public-private partnership

configuration of the aviation logistics system, chains, flows

identification of aviation logistic business processes

motivation, stimulation, planning, synergy of logistics activities

TOPIC 7: Strategy and tactics of logistics management of aviation companies

Questions (tasks) for self-study:

1. Strategic planning of long-term logistics activities.
2. The innovative nature of the development of economic entities of aviation logistics.
3. Conditions, opportunities and expediency of creating stabilization, functioning, transformation, development and liquidation of logistics departments or enterprises and networks.
4. The search for modern ways of implementing partnership and integration of enterprises and organizations of a complete system of air transport activities and logistics service for the production of the final product and service for the final consumer - the client-customer of complex logistics services.
5. Applying of basic strategic directions of organization and management of logistics functions and business processes.

List of reference:

1. Кулик В.А., Григорак М.Ю., Костюченко Л.В. Логістичний менеджмент: навч. посібник. К.: НАУ, 2012. 260 с.
2. What is Diversification? URL: <https://corporatefinanceinstitute.com/resources/management/diversification/>
3. Non-aeronautical revenues: Diversify and grow URL: <https://airport-world.com/non-aeronautical-revenues-diversify-and-grow/>
4. Diversifying Revenue Streams For Airlines URL: <https://aviationoutlook.com/diversifying-revenue-streams-for-airlines/>
5. Antonin Kazda, Benedikt Badanik, Anna Tomova, Isabelle Laplace, Nathalie Lenoir Future airports development strategies URL: 10.26552/com.C.2013.2.19-24
6. A Guide to Legacy Carriers URL: <https://www.alternativeairlines.com/legacy-carriers>
7. What's the difference between low-cost and legacy airline carriers? URL: <https://www.kiwi.com/en/help/albth-en-rhlat-115/article/what-s-the-difference-between-low-cost-and-legacy-airline-carriers-93/>
8. The ambition of Airline product differentiation URL: <https://www.linkedin.com/pulse/ambition-airline-product-differentiation-eric-leopold/>

Questions:

1. What is strategy?
2. What is the purpose of strategic planning?
3. What strategies belong to the group of growth strategies?
4. What strategies belong to the group of stabilizing strategies?
5. What strategies belong to the group of reduction strategies?
6. What are main directions of partnership management?
7. What diversification strategies are there for airports?
8. What diversification strategies are there for airlines?

9. What concentration strategies are there for airports?
10. What concentration strategies are there for airlines?
11. What differentiation strategies are there for airports?
12. What differentiation strategies are there for airlines?

Tests:

The group of growth strategies can include ...

the strategy of concentrated growth, the strategy of integrated growth, the strategy of diversified growth

the strategy of slow movement, the "pause" strategy, the strategy of reducing costs partial renunciation of independence, "harvest", sale of assets, reduction of activities, bankruptcy, liquidation

The group of strategies for stabilizing or maintaining the market can include ...

the strategy of concentrated growth, the strategy of integrated growth, the strategy of diversified growth

the strategy of slow movement, the "pause" strategy, the strategy of reducing costs partial renunciation of independence, "harvest", sale of assets, reduction of activities, bankruptcy, liquidation

The group of reduction strategies can include ...

the strategy of concentrated growth, the strategy of integrated growth, the strategy of diversified growth

the strategy of slow movement, the "pause" strategy, the strategy of reducing costs partial renunciation of independence, "harvest", sale of assets, reduction of activities, bankruptcy, liquidation

What strategy is a technique of allocating portfolio resources or capital to a mix of different investments?

diversification strategy

outsourcing strategy

specialization strategy

concentration strategy

What strategy is focused to develop airport aero-nautical activities?

diversification strategy

outsourcing strategy

specialization strategy

concentration strategy

What strategy is focused to develop airline special passenger or cargo transport activities?

diversification strategy

outsourcing strategy

specialization strategy

concentration strategy

What strategy involves trying to compete successfully within a single direction?

diversification strategy

outsourcing strategy

specialization strategy

concentration strategy

What strategy involves reducing costs and increasing efficiency by hiring another person or company to perform tasks, provide services, or perform operations that were previously performed by in-house employees?

diversification strategy

outsourcing strategy

specialization strategy

concentration strategy

TOPIC 8: Modern organizational forms of partnership management in logistics chains of air transportation

Questions (tasks) for self-study:

1. Modern trends of vertical integration.
2. Consecutive stages of the formation of a chain of complex logistics services.
3. Twelve stages of partnership formation.
4. Market distribution of risks, powers and responsibilities of logistics network entities. Applying of outsourcing and vertical disintegration.
5. Creation of e-commerce logistics hubs.
6. Applying of forms and methods of management of virtual logistics corporate associations.
7. Development of the functions of a system integrator and coordinator of logistics system entities.
8. Development of international transport infrastructure.
9. Management of the integration of national transport systems and the creation of a single information logistics space, a single global cross-border logistics system.

List of reference:

1. Кулик В.А., Григорак М.Ю., Костюченко Л.В. Логістичний менеджмент: навч. посібник. К.: НАУ, 2012. 260 с.
2. Vertical Integration in Aviation Supply Chain. URL: <https://www.linkedin.com/pulse/vertical-integration-aviation-supply-chain-garth-moffatt/>
3. Market Power: Airports URL: <https://openknowledge.worldbank.org/server/api/core/bitstreams/a9949d1e-1b2d-5344-9e92-d26113985f00/content>

4. How Air Freight Works: The Complete Process Explained URL: <https://icecargo.com.au/how-air-freight-process-works/>
5. The 12 phases of the partnership process URL: <https://lederindsigt.dk/en/content/12-faser-i-partnerskabsprocessen/>
6. Ying Jing Research and analysis of airline supply chain risk management URL: <https://www.deanfrancispress.com/index.php/hc/article/download/391/HC000782.pdf/1895>
7. Lynn Frederick Dsouza Managing Risk in the Aviation Supply Chain URL: <https://www.linkedin.com/pulse/managing-risk-aviation-supply-chain-espiridi/>
8. Virtual Logistics Teams Are On The Rise URL: <https://www.redwoodlogistics.com/insights/virtual-logistics-teams-are-on-the-rise>
9. Virtual Corporations | Encyclopedia.com URL: <https://www.encyclopedia.com/management/encyclopedias-almanacs-transcripts-and-maps/virtual-corporations>
10. Virtual Supply Chain (VSC) URL: <https://ciiscmconnect.com/virtual-supply-chain-vsc/>
11. Transport Infrastructure Development Performance. URL: https://www.researchgate.net/publication/314269225_Transport_Infrastructure_Development_Performance [accessed Mar 12 2024].
12. Rebuilding Ukraine's infrastructure after the war URL: <https://wiiw.ac.at/rebuilding-ukraine-s-infrastructure-after-the-war-dlp-6621.pdf>

Questions:

1. What vertical integration trends do you know?
2. What are stages of the formation of a chain of complex air logistics services?
3. What are twelve stages of partnership formation?
4. What are the main types of risks faced by the supply chain of airlines?
5. What components of risk management in the aviation supply chain do you know?
6. What functions are airlines likely to outsource?
7. What are the functions of e-commerce aviation logistics hubs?
8. What is a virtual supply chain?
9. What is hard transport infrastructure?
10. What is soft transport infrastructure?
11. What are the challenges in the development of transport aviation infrastructure in Ukraine?

Tests:

What strategy allows a company to streamline its operations by taking direct ownership of various stages of its production process rather than relying on external contractors or suppliers?

vertical integration strategy

horizontal integration strategy

vertical and horizontal integration strategy

outsourcing strategy

What functions very likely to be outsourced by airlines?

Ticket Sales and Distribution. Aircraft Leasing. Airport Gates. Complimentary Limousine Pick-Up. Food Services. Ticketing. Baggage Handlers. Aircraft Interior Cleaning

Cargo Handling and Operations. Marketing. Human Resources Management and Recruitment

Engine Overhaul or Rework. Maintenance Training. Information Systems and Technology. Pilot Training. Advertising

Pilots. Strategic Management. Flight Attendants. Accounting. Routine Hanger Maintenance.

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Engine Overhaul or Rework. Maintenance Training. Information Systems and Technology. Pilot Training. Advertising

Pilots. Strategic Management. Flight Attendants. Accounting. Routine Hanger Maintenance.

TOPIC 9: Cluster strategy of airport-hubs in the system of regulation of air transportation of chains

Questions (tasks) for self-study:

1. Prerequisites and expediency of the geo-economic stage of strategic management of the development of transport activities.
2. The transport and logistics cluster of airports as a modern form of air transport organization at the national and international levels.
3. Basic concepts of clustering.
4. Cluster according to M. Porter.
5. Classification of clusters.
6. The dual character of the concept of logistics clustering in air transport.
7. Formation of transport and logistics clusters and their cores.
8. Formation of horizontal functional integration of economic entities.
9. A set of business enterprises: logistics centers, adjacent support and service companies as an informal association, functioning on the basis of the “4C” criteria.

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2. Gritsenko S.I., Karpun O.V. () Creation of aviation transport and logistic clusters network. *Intellectualization of logistics and Supply Chain Management*. [Online], 2020. Vol.2, pp.7-15, URL: <https://doi.org/10.46783/smart-scm/2020-2-1>
3. Porter, Michael E. "Clusters and the New Economics of Competition." *Harvard Business Review* 76, no. 6 (November–December 1998): 77–90.
4. Dmuchowski, Robert. "The concept of logistics clusters and efficiency of economic enterprises." *Journal of European Economy* 18.3 (2019): 351-361.

Questions:

1. What is the influence of the geo-economic indicator on the strategic management of transport activities?
2. What is the advantage of using transport and logistics clusters of airports in Ukraine?
3. What is a cluster?
4. What is a cluster by M. Porter?
5. What is a transport and logistics cluster?
6. What is the classification of clusters?
7. What are the goals of logistics clusters?

Tests:

Examples of external business clusters in airport includes:

Transportation (buses, taxi etc.)

International airport transport (train, buggys), escalators, lifts

Fast food restaurants

Department stores

Airport control

Border control

Examples of internal business clusters in airport includes:

Transportation (buses, taxi etc.)

International airport transport (train, buggys), escalators, lifts

Fast food restaurants

Department stores

Airport control

Border control

What type of cluster is a cluster of businesses in a geographical location where enough resources have accumulated to give a competitive advantage to businesses in a given economic branch?

Geographical cluster

Sectoral clusters

Horizontal cluster

Vertical cluster

What type of cluster is a cluster of businesses operating together from within the same economic sector?

Geographical cluster

Sectoral clusters

Horizontal cluster

Vertical cluster

What type of cluster is built between businesses that compete for the same market?

Geographical cluster

Sectoral clusters

Horizontal cluster

Vertical cluster

What type of cluster is alliance between businesses which belong to different levels of the same supply chain, such as a buyer assisting its suppliers in upgrading?

Geographical cluster

Sectoral clusters

Horizontal cluster

Vertical cluster

TOPIC 10: Regulation of international air transport

Questions (tasks) for self-study:

1. Peculiarities of control, regulation and management systems in air transport.
2. The structure, legal framework of the bodies carrying out the regulatory process at the national, regional and international levels.
3. ICAO standards, regulations, rules and other instructional materials on the regulation of air transport activities.
4. Categories of air transport markets: between a pair of cities, between a pair of states, interregional, intercontinental and worldwide air markets.
5. Peculiarities of legislation on open competition.

List of reference:

1. Manual on the regulation of international air transport (Doc 9626). Current edition.
2. ICAO URL: <https://www.icao.int/Pages/default.aspx>

Questions:

1. What are the three basic components of the process of national regulation of air transport?
2. What is bilateral regulation of air transport?
3. What is multilateral regulation of air transport?
4. What is role of ICAO in regulation of air transport?
5. What is an airline city pair?
6. What is a city pair in commercial aviation?
7. How can you classify air services by the geographical areas?
8. What component of the process of national regulation do you know?
9. What is a route right?
10. What is an operational right?
11. What is a traffic right?

Tests:

Standards and Recommended Practices for the licensing of flight crew members (pilots, flight engineers and flight navigators), air traffic controllers, aeronautical station operators, maintenance technicians and flight dispatchers, are provided by...

ANNEX 1 Personnel Licensing to the Convention on International Civil Aviation

ANNEX 2 Rules of the Air to the Convention on International Civil Aviation

ANNEX 18 The Safe Transport of Dangerous Goods by Air

ANNEX 19 Safety Management

The rules developed by ICAO - which consist of general rules, visual flight rules and instrument flight rules contained in ...

ANNEX 1 Personnel Licensing to the Convention on International Civil Aviation

ANNEX 2 Rules of the Air to the Convention on International Civil Aviation

ANNEX 18 The Safe Transport of Dangerous Goods by Air

ANNEX 19 Safety Management

What Annex specifies the broad Standards and Recommended Practices to be followed to enable dangerous goods to be carried safely?

ANNEX 1 Personnel Licensing to the Convention on International Civil Aviation

ANNEX 2 Rules of the Air to the Convention on International Civil Aviation

ANNEX 18 The Safe Transport of Dangerous Goods by Air

ANNEX 19 Safety Management

What Annex is dedicated to safety management will re-enforce the role played by the State in managing safety at the State level, stressing the concept of overall safety performance in all domains, in coordination with service providers?

ANNEX 1 Personnel Licensing to the Convention on International Civil Aviation

ANNEX 2 Rules of the Air to the Convention on International Civil Aviation

ANNEX 18 The Safe Transport of Dangerous Goods by Air

ANNEX 19 Safety Management

What air service operates wholly within the territory of a State?

a domestic air service

an international air service

a regional air service

a cross-border service

What air service passes through the airspace over the territory of more than one State?

a domestic air service

an international air service

a regional air service

a cross-border service

What air service offered on routes serving smaller cities within a region or between regions of a State?

a domestic air service

an international air service

a regional air service

a cross-border service

What international short-haul air service are carried out across the borders of two contiguous States.

a domestic air service

an international air service

a regional air service

a cross-border service

TOPIC 11: Economic aspects of air navigation service of air transport

Questions (tasks) for self-study:

1. Organizational structuring of the aeronautical flight service system.
2. Formation and management of air navigation infrastructure, types and characteristics of services.
3. System instructional rules and regulations for the functioning of state and operational services, airport and navigation fees assigning authorities.
4. Principles, policies and procedures of navigation service.
5. Valuation of air traffic navigation services (3 basic principles).
6. The main 5 components of navigation service and air traffic service, aviation telecommunications, meteorological service, search and rescue service, aeronautical information service.
7. Functions of the state department.
8. Autonomous organization of the public sector.
9. Organization of the private sector.
10. International cooperation in search and rescue. Activities of operational agencies of air navigation services and collection of fees.

List of references:

1. Aeronautical System URL: <https://www.igi-global.com/dictionary/aeronautical-system/71689>
2. Manual on Air Navigation Services Economics Doc 9161. Current edition.
3. Convention on International Civil Aviation - Doc 7300
4. Annex 12 to the Convention on International Civil Aviation. Search and Rescue. Current edition

Questions:

1. What is Aeronautical System?
2. What factors does the State take into account when deciding on the organizational structure of the ANSP at the national level?
3. What is the historical organizational format of the ANSP?
4. What is an autonomous air navigation services entity?
5. What is international cooperative ventures of the ANSP?
6. What are types of air navigation services and responsibilities of their services?
7. What are basic principles of air traffic navigation services?
8. What are functions of the State in the air navigation services?
9. What is the autonomous air navigation services entity?
10. What are principals of private participation in air navigation services?
11. What are the basic principles of organization of search and rescue?
12. What is the charges collection agency?

Tests:

A system consisting of a ground part and an air part, both of which are needed to ensure the safe and efficient movement of aircraft during all phases of operation is...

Air traffic management
Search and rescue
Aeronautical information services
Meteorological services for air navigation

What facilities and services furnish aviation with meteorological forecasts, briefs and observations?

Air traffic management
Search and rescue
Aeronautical information services
Meteorological services for air navigation

What service was established in support of international civil aviation, whose objective is to ensure the flow of information necessary for the safety, regularity, and efficiency of international air navigation?

Air traffic management
Search and rescue
Aeronautical information services
Meteorological services for air navigation

What type of entity would collect route air navigation services charges on behalf of all of the participating States, including those that are overflown?

Charges collection agency
Autonomous air navigation service
State air navigation service
Air traffic service

What type of entity is essentially an independent entity established for the purpose of operating and managing air navigation services, which is empowered to manage and use the revenues it generates to cover its costs?

Charges collection agency
Autonomous air navigation service
State air navigation service
Air traffic service

TOPIC 12: Synergistic efficiency of aviation management

Questions (tasks) for self-study:

1. Social and economic efficiency of international air transport logistics activities in the conditions of globalization of the world market of production and consumption of products and services.
2. The leading role of the interests of consumers – customers of logistics services.
3. Corporateness as the main feature of logistics activity.

4. Organizational corporate culture and moral and ethical principles of interaction between subjects of logistics activity.
5. Synergy as a complementary effect of international partnership interaction.
6. The geoeconomic effect of post-logistics influence on the integration processes of optimizing the use of resources, solving demographic problems.
7. Additional possibilities of cognitive development of humanity, communication and mutual understanding.

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1. Supporting economic & social development. URL: <https://atag.org/industry-topics/supporting-economic-social-development>
2. Eunil Park. The role of satisfaction on customer reuse to airline services: An application of Big Data approaches. Journal of Retailing and Consumer Services. Volume 47. 2019. P. 370-374. URL: <https://doi.org/10.1016/j.jretconser.2019.01.004>.
3. Ruby Chanda, Komal Chopra. Customer Experience Management in Airline Industry. URL: https://www.researchgate.net/publication/331802119_Customer_Experience_Management_in_Airline_Industry.
4. Hemant Puthli Five Fundamental Principles of Partnership URL: <https://hemantputhli.com/2011/10/04/partnership-fundas/>
5. Types of Airline Partnerships URL: <https://fastercapital.com/topics/types-of-airline-partnerships.html>.
6. How Company Culture Shapes Success in Aviation URL: <https://www.linkedin.com/pulse/how-company-culture-shapes-success-aviation-wiccinac/>.
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8. Dr. Sasidharan Murugan The Key Factors Driving Growth in the Global Aviation Industry. URL: <https://www.linkedin.com/pulse/key-factors-driving-growth-global-aviation-industry-murugan/>
9. 5 Types of Communication Used in Aviation. URL: <https://www.wccaviation.com/blogs/5-types-of-communication-used-in-aviation>
10. How can Aviation professionals work effectively with colleagues from diverse cultures? URL: <https://www.linkedin.com/advice/0/how-can-aviation-professionals-work-effectively-colleagues-wx5re>.

Questions:

1. What is the role of international air transport?
2. What types of communication are used in international air transport?
3. What are fundamental principles of partnership?
4. What types of airline partnerships are used in international air transport?

5. What types of benefits are by airline partnerships?
6. How does aviation company culture help to improve interaction between subjects of aviation logistics activity?
7. How can airlines approach synergy via partnerships?
8. What factors influence the aviation industry globally?

Tests:

What type of partnership applies by airlines agree to sell seats on each other's flights, which means that one airline can sell tickets for a flight operated by another airline?

Code-sharing partnership

Interline partnership

Alliance partnership

Equity partnership

What type of partnership allows airlines to sell tickets that include flights operated by multiple airlines (can purchase a single ticket that covers flights on two or more airlines)?

Code-sharing partnership

Interline partnership

Alliance partnership

Equity partnership

What type of partnership are agreements between multiple airlines to cooperate on a variety of fronts, including marketing, frequent flyer programs, and code-sharing?

Code-sharing partnership

Interline partnership

Alliance partnership

Equity partnership