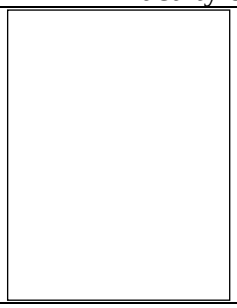
	Syllabus on **«DEMAND PLANNING AND INVENTORY MANAGEMENT»** **Educational Professional Program:** **«Logistics»** Specialty: 073 “Management” Field of study: 07 “Management and Administration”
Level of postsecondary education	Master
Course status	Subject Selected by Students
Year	1
Semester	2
Credit hours/academic hours	120/4,0
Language of course delivery	English
Course description	Acquisition of theoretical knowledge and practical skills in demand planning and inventory management under conditions of stochasticity; students' acquisition of theoretical knowledge on demand planning and inventory management; mastering the methodological tools of demand planning and forecasting to solve practical problems; students acquire skills in inventory management of the enterprise and supply chain under conditions of stochasticity.
Course rationale (aim)	The aim of the course is to form systematic knowledge and understanding of the conceptual foundations of demand planning and inventory management. The objectives of the subject are: acquisition of theoretical knowledge of demand planning and inventory management by students; mastering the methodological tools of demand planning and forecasting to solve practical problems; acquiring skills in inventory management of the enterprise and supply chain.
Learning outcomes	- PLO1. To critically comprehend, select and use the necessary scientific, methodological and analytical tools for management in unpredictable conditions; - - PLO15. To manage financial flows in logistics systems, optimize logistics costs and develop a budget for logistics activities; - PLO16. Use information technology and information systems to monitor and optimize logistics processes and systems based on the processing of large databases; - PLO 18. Use specialized conceptual knowledge that is the basis for original thinking and innovation, in particular in the context of research. - PLO 19. Be able to use methodological tools to substantiate strategic decisions on supply chain management and the formation of perfect supply chains
Acquired skills and competencies	- IC1. Ability to solve complex tasks and problems in the field of logistics business process management or in the learning process, which involves research and / or innovation and is characterized by uncertainty of conditions and requirements; - GC3. Skills in the use of information and communication technologies; - GC8. Ability to formulate conclusions and recommendations based on the results of research, to calculate the effectiveness of research; - PC4. Ability to effectively use and develop organizational resources.

Course content	**Course content:** Fundamentals of demand forecasting and planning. Qualitative and quantitative forecasting methods. Demand forecasting: the theory of utility. Forecasting the demand for food products. Basics of inventory management. Analysis of basic inventory management systems in conditions of variable demand. Features of the functioning of the maximum-minimum system in conditions of variable demand **Types of classes:** lectures, practicals **Teaching methods:** explanatory-illustrative method; method of problem statement; reproductive method; research method; business game. **Format of learning:** full-time
Prerequisites	"Logistics Management", "Strategic Supply Chain Management" and complements the knowledge of such subjects as "Risk Management in Logistics", "Logistics Systems Design"
Application	-
Information Resources	**NAU repository:** Course Training Program, list of questions for module test and Graded Test, educational and periodical literature on logistics audit. **List of references** 1. Muller M. Essentials of inventory management. – HarperCollins Leadership, 2019. 2. David B, G., Trautrims, A., & Wong, C. Y. (2021). Sustainable logistics and supply chain management. Kogan page. 3. Rushton A., Croucher P., Baker P. The handbook of logistics and distribution management: Understanding the supply chain. – Kogan Page Publishers, 2022. 4. Ailawadi, S. C., & SINGH, P. R. (2021). Logistics and Supply Chain Management. PHI Learning Pvt. Ltd. 5. Khan, S. A. R., & Yu, Z. (2019). Strategic supply chain management (pp. 1-290). Switzerland: Springer.
Location and technical support	Auditoriums of theoretical training, practicals, computer software, multimedia equipment, Google Classroom
Assessment methods, final examinations	Module Test, Graded Test
Department	Logistics Department
Faculty	Faculty of Transportation, Management and Logistics
Instructor	 **KUNYTSKA OLGA MUKOLAIIVNA** **Position:** associated professor **Teacher's profile: In process** **Phone.:** +38(044) 406-7821 **E-mail:** olha.kunytska@npp.nau.edu.ua **Office**: 2.126
Course authenticity	Combining and constantly updating modern material on logistics audit, applying in practical training of original business cases and developed business games
Course URL	In process