

<b>Course title: Theory of Logistics Systems</b>	<b>Neptun code: GEALT410-a</b>
<b>Course coordinator: Dr. Péter Telek, PhD, associate professor</b>	
type of lesson and number of lessons: <b>lecture (2)</b>	
method of evaluation: colloquium	
curriculum location of the subject: (autumn/spring semester): autumn and spring	
pre-study conditions ( <i>if any</i> ): -	
<b>The task and purpose of the subject:</b>	
Presentation of structure, characterizations and operation of logistic systems. Students obtaining the course will be able to design and effectively operate different logistic systems.	
<b>Course description:</b>	
Definition and description of logistic systems. Structures, elements and relations in logistic systems. General system elements and their role in logistic systems. Variations of logistic systems. Types, characterisations and main application fields of internal logistic systems. Types, characterisations and main application fields of external logistic systems. Logistic networks and virtual companies. Mathematical description of logistic systems. Modelling of different logistic systems. Main applications of logistic system models.	
<b>Required literature:</b>	
<ol style="list-style-type: none"> <li>1. Apple, J. M.: Material handling system design. John Wiley &amp; sons. New York. 1977.</li> <li>2. Kulwicz, R. A.: Materials handling handbook. John Wiley &amp; sons. New York. 1985.</li> <li>3. Christopher, M.: Logistics and supply chain management. Pearson. 2016.</li> </ol>	
<b>Recommended literature:</b>	
<ol style="list-style-type: none"> <li>1. Wing, G. M.: An introduction to transport theory. John Wiley &amp; sons. New York - London. 1962.</li> <li>2. Telek, P. Equipment preselection for integrated design of materials handling systems. ALS. 7(2), 57-66, 2013</li> </ol>	