

Course title: Production Logistics	Neptun code: GEALT413-a
Course coordinator: Dr. Tamás Bányai, PhD, dr. habil., professor	
type of lesson and number of lessons: lecture (2)	
method of evaluation: colloquium	
curriculum location of the subject: (autumn/spring semester): autumn and spring	
pre-study conditions (<i>if any</i>): -	
The task and purpose of the subject:	
During the course, students are introduced to the role and content of the production logistics systems. Students will gain an overview of typical production philosophies, strategies, supporting manufacturing and assembly systems, and basic inventory concepts and methods.	
Course description:	
Production systems and processes, models and methods for their design and management. Production logistics information system. Scheduling and planning of production integrated with logistics. Logistics of computer integrated manufacturing (CIM) and computer integrated logistics (CIL). Logistics of JIT manufacturing, synchronous manufacturing and KANBAN manufacturing. Strategic issues in production logistics management. Optimisation of material flow characteristics. Product tracking solutions. Optimal design of information technology in production logistics. Logistics tasks related to quality assurance and waste recycling.	
Required literature:	
1. Pedro García Márquez, F. (ed.), Segovia Ramirez, I. (ed.), Bányai, T. (ed.), Tamás, P. (ed.): Lean Manufacturing and Six Sigma - Behind the Mask, London, United Kingdom /England : InTech Open Access Publisher (2020), ISBN: 9781789239072	
2. Peter N., Hans-Peter W.: Fundamentals of Production Logistics: Theory, Tools and Applications: DOI: 10.1007/978-3-540-34211-3, ISBN: 978-3-540-34210-6, 2008	
Recommended literature:	
1. James M. Apple: Plant layout and material handling, John Wiley & Sons, ISBN 0471-07171-4	