

**Course Syllabus**  
**EGLS 519 Special Topics in industrial and Service Logistics**  
**Semester 1 Academic Year 2018**

**Course ID and name:** EGLS 519 Special Topics in industrial and Service Logistics

**Course coordinator:** Dr. Detcharat Sumrit

**Instructors:** Academic Staffs

**Credits:** 3(3-0-6)

**Curriculum:** Master of Engineering Program in Logistics and Supply Chain (Special Program)

**Semester offering:** First semester

**Prerequisite:** None

**Course Description:**

Current topics in logistics engineering and management in industry and service; Logistics management at macro level; National strategic logistics plan; Logistics management in manufacturing and service industries; Technique and technology for logistics management, Ethics in logistics management

**Course Learning Outcomes (CLOs)**

At the end of the course, the students will be able to

1. create academic work with integrity in Special Topics in industrial and Service Logistics.
2. efficiently apply Special Topics in industrial and Service Logistics principles of inventory, warehouse, and transportation and distribution management
3. apply knowledge of Special Topics in industrial and Service Logistics in industry and service improvement
4. systemically analyze problems and propose solutions in Special Topics in industrial and Service Logistics via research methodology
5. work as a team with other disciplines related to Special Topics in industrial and Service Logistics
6. communicate and select suitable method for presentation in Special Topics in industrial and Service Logistics

**Constructive Alignment of CLO s and Program s ELO s**

CLOs	ELO 1	ELO 2	ELO 3	ELO 4	ELO 5	ELO 6
1	I, R					
2		R				
3			R			
4				R		
5					R, P	
6						R, P

I = ELO is introduced & assessed

P = ELO is practiced & assessed

R = ELO is reinforced & assessed

M = Level of Mastery is assessed

**Course Schedule:**

No.	Topic	Teaching & Learning Strategy	Assessment	Instructor
1	The impact of Industry 4.0 revolution on Supply Chain	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
2	14 Principles of the Toyota Way	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
3	Omni-channel Logistics	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
4	Practical Problem Solving	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
5	Sharing Economy Logistics	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit

6	Mercedes Benz Production System	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
7	Risk Management Principle	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
8	Entrepreneurship Theory for Small Logistics Business	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
9	Knowledge Management in Supply Chain	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
10	Transportation Behavior	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
11	Flexible Manufacturing Part I	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
12	Flexible Manufacturing Part II	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
13	Debate Thailand's Debate Thailand's Logistics Roadmap	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
14	Assignment I	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
15	Assignment II	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit

#### Assessment Criteria

Class participation	10%
Individual work	20%
Group work	20%
Final examination	50%

#### Appeal Procedure

Should the students have any appeal regarding the assessments or grade, inquiry can be made to the instructors and/or the course coordinator immediately either by direct contact, telephone or email.

#### Study Material

- D.J. Closs, T.J. Goldsby, S.R. Clinton, Information technology influences on world class logistics capability, Int. J. Phys. Distrib. Logist. Manag. 17-4 (1997) (1)27
- Angeles, R., .2006RFID technologies: supply-chain applications and implementation issues. Inf. Syst. Manag. (1) 22, 51e.65
- Baur, C., Wee, D., .2015Manufacturing's Next Act? McKinsey & Company.
- He, Z., Chen, P., Liu, H., Guo, Z., .2017Performance measurement system and strategies for developing low-carbon logistics: a case study in China. J. Clean. Prod.156, 395e.405
- Hermann, M., Pentek, T., Otto, B., .2016Design Principles for Industrie 0.4 Scenarios. Presented at the 49th Hawaiian International Conference on Systems Science.
- KIET, .2017Impact of the Fourth Industrial Revolution on Korea Manufacturing Industries and its Implications, Report, Korea Institute for Industrial Economics and Trade.
- Lee, J., Bagheri, B., Kao, H., .2014Recent advances and trends of cyber-physical systems and big data analytics in industrial informatics. In: IEEE Int. Conference on Industrial Informatics (INDIN).
- Zhang, Y., Zhang, G., Wang, J., Sun, S., Si, S., Yang, T., .2015Real-time information capturing and integration framework of the internet of manufacturing things. Int. J. Comput. Integrated Manuf. (8) 28, 811e.822