

Course Syllabus
EGLS 513 Innovation and Product Development Chain
Semester 1 Academic Year 2018

Course ID and name: EGLS 513 Innovation and Product Development Chain

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:

Innovation and product development process in supply chain; Creativity; Demand survey; Conversion of customer demand to product specification; Quality function deployment; House of quality; Concurrent engineering; Prototyping; Product feasibility study; Stakeholders in product development; Performance measurement; Information and technology; Interesting topics and case study in innovation and product development chain

Course Learning Outcomes (CLOs)

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

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

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		I, R				
3			I, R			
4				I, R		
5					I, M	
6						I, P

I = ELO is introduced & assessed

R = ELO is reinforced & assessed

P = ELO is practiced & assessed

M = Level of Mastery is assessed

Course Schedule:

No.	Topic	Teaching & Learning Strategy	Assessment	Instructor
1	Introduction of Strategic Management of Technological Innovation and New Product Development	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
2	Source of Innovation	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
3	Type and Patterns of Innovation	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
4	Theories of Innovation	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
5	The Process of Innovation	Lecture, Case Study,	Q&A, feedback	Dr. Detcharat

		Discussion		Sumrit
6	Standards Barriers and Design Dominance	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
7	Optimal Time Market Entry	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
8	Technological Entrepreneurs	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
9	Managing Intellectual Property	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
10	Product and Brand Strategy	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
11	New Product Development Process	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
12	Fuzzy Front End Process for New Product Development	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
13	Back End Process for New Product Development	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
14	New Service Development	Lecture, Case Study, Discussion	Q&A, feedback	Dr. Detcharat Sumrit
15	Knowledge Management and Learning for Innovation	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

Trott, P. 2017, Innovation Management and New Product Development (6th ed), Portsmouth Business School, Harlow, UK: Pearson Education.

Ahmed, P.K. and Shepherd, C.D., 2010, Innovation Management: Context, Strategies, Systems and Processes, UK: Pearson Education.

Smith, D. 2006, Exploring Innovation, UK: McGraw-Hill Education.