Course Syllabus
EGLS 511 Special Topics in Healthcare Logistics and Supply Chain
Semester 1 Academic Year 2018

Course ID and name: EGLS 511 Special Topics in Healthcare Logistics and Supply 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:

Modern topics in healthcare logistics and supply chain; National strategic healthcare logistics plan; Logistics management in healthcare service; Technique and technology for healthcare logistics management; Ethics in healthcare logistics

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 Healthcare Logistics and Supply Chain.
2. efficiently apply Special Topics in Healthcare Logistics and Supply Chain principles of inventory, warehouse, and transportation and distribution management
3. apply knowledge of Special Topics in Healthcare Logistics and Supply Chain in industry and service improvement
4. systemically analyze problems and propose solutions in Special Topics in Healthcare Logistics and Supply Chain via research methodology
5. work as a team with other disciplines related to Special Topics in Healthcare Logistics and Supply Chain
6. communicate and select suitable method for presentation in Special Topics in Healthcare Logistics and Supply 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		R				
3			R			
4				R		
5					R, P	
6						R, 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 to Special Topics in Healthcare Logistics and Supply Chain	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
2	Challenges in healthcare logistics industry	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
3	Logistics management in healthcare service	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
4	National strategic healthcare logistics plan	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit

5	Ethics in healthcare logistics	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
6	Distruptive technology for healthcare logistics management	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
7	Distruptive technology for healthcare logistics management (cont.)	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
8	Data Mining and Big data, and applications in healthcare	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
9	Data Mining and Big data, and applications in healthcare (cont.)	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
10	Data Analytics for Healthcare Management	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
11	Data Analytics for Healthcare Management (cont.)	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
12	Best Practice in Healthcare Logistics	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
13	Best Practice in Healthcare Logistics (cont.)	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
14	Group Work Presentation	Lecture, Case Study, Discussion	Q&A, feedback	Dr.Detcharat Sumrit
15	Guest Speaker	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

Prashant Natarajan et al. (2017) Demystifying Big Data and Machine Learning for Healthcare (Himss Book). CRC Press. USA

Vince Reynolds (2016). Big Data For Beginners: Understanding SMART Big Data, Data Mining & Data Analytics For improved Business Performance, Life Decisions & More! CreateSpace Independent Publishing Platform. USA.

Krisa Tailor. (2015). The Patient Revolution: How Big Data and Analytics Are Transforming the Health Care Experience. Wiley. USA.