UCLouvain

llsms2033

2021

International Supply Chain Management

5.00 credits	30.0 h	Q2

Teacher(s)	Agrell Per Joakim ;Chevalier Philippe ;
Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	This course is reserved for students with a bachelor's degree in management engineering or students with equivalent quantitative method skills.
Main themes	This advanced course describes the logistics systems, their managerial objectives and the current trends in the development of advanced decision support systems. In particular, emphasis is put on modeling and solving logistics problems using state-of-the-art approaches. The transportation, distribution and warehousing functions will be studied indetails through lectures and case studies.
Learning outcomes	**At the end of this learning unit, the student is able to :** **During their programme, students of the LSM Master's in management and Master's in Business engineering will have developed the following capabilities'** **KNOWLEDGE AND REASONING** • Master highly specific knowledge in one or two areas of management : advanced and current research-based knowledge and methods. **A SCIENTIFIC AND SYSTEMATIC APPROACH** • Consider problems using a systemic and holistic approach : recognize the different aspects of the situation and their interactions in a dynamic process. 1 **WORK EFFECTIVELY IN AN INTERNATIONAL AND MULTICULTURAL ENVIRONMENT** • Understand the inner workings of an organization : develop a global approach and integrate the internal logic used within the organization. • Position and understand the functioning of an organization, in its local and international socio-economic dimensions and identify the associated strategic issues and operational decisions. **TEAMWORK AND LEADERSHIP** • Work in a team :Join in and collaborate with team members. Be open and take into consideration the different points of view and ways of thinking, manage differences and conflicts constructively, accept diversity.
Evaluation methods	**Continuous evaluation** • Date: *Announced on Moodle* • Type of evaluation: *Group work (I&II)* • Comments: *40% of final grade* **Evaluation week** • Oral: *No* • Written: *No* • Unavailability or comments: *No* **Examination session** • Oral: *No* • Written: *2 hours (open book and notes), 60% of grade* • Unavailability or comments: *Continuous evaluation activities will not be organized for the September session, this part of the evaluation for the grade in September will be based on the activities of the semester.*
Teaching methods	The class is mainly analytical and based on modern readings in the area. The sessions are devoted to theoretical discussions of selected aspects and debriefs of cases and assignments. Participants work on two group cases to be submitted and presented orally.

Content	1. Introduction to International supply chain systems, economic, time and fiscal criteria 2. Models and methods - Network Optimisation models and methods, - Mixed Integer Programming and decomposition methods, - Heuristic optimisation methods. 3. Design of Logistics Network 4. Maritime international freight 5. Risk and uncertainty modelling 6. Spatial modelling
Inline resources	Moodle webpage
Bibliography	Stadtler H., C. Kilger (Eds), Supply chain management and advanced planning : concepts, models, software and case studies , 2d edition, Springer, 2002. - Y. Pochet, L.A.Wolsey: Production Planning by Mixed Integer Programming , Springer, 2006. - Introduction to Logistics Systems Planning & Control, Ghiani, Laporte, Musmanne, Wiley 2004. No book protected by copyright. . READING FILE compulsory and available on line Supports available on line are on Moodle.
Other infos	References : - Additional and more specialized references will be provided during the class Internationalisation : 1 international content (does the course tackle international issues related to the course content ?) 1 international case study Corporate features : 1 case study 1 corporate guest Skills : 1 presentation skills 1 writing skills 1 team work 1 problem solving 1 decision making 1 critical thinking Techniques and tools for teaching and learning : 1 IT tools 1 modelling 1 quantitative methods 1 mathematics
Faculty or entity in charge	CLSM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] : Business Engineering	INGM2M	5		🔍
Master [120] : Business Engineering	INGE2M	5		🔍