UCL Université catholique de Louvain

LLSMS2032

2015-2016

Operations Management and Factory Physics (in English)

5.0 credits	30.0 h	2q

Teacher(s) :	Corluy Olivier (compensates Chevalier Philippe) ; Chevalier Philippe ;
Language :	Anglais
Place of the course	Louvain-la-Neuve
Prerequisites :	an introductory course in operations management a probability course
Main themes :	This course presents the key underlying principles that drive operations efficiency in a factory, in services or in a supply chain. These principles can be used to gain valuable insight for complex real-life problems.
Aims :	Having regard to the LO of the programme X, this activity contributes to the development and acquisition of the following LO: -- 1. Corporate citizenship 1.1. 'Demonstrate independent reasoning, look critically ' 1.3. Decide and act responsibly ' 2. Knowledge and reasoning 2.1. Master the core knowledge of each area of management. 2.2. Master highly specific knowledge ' 2.4. Activate and apply the acquired knowledge ' 3. A scientific and systematif approach 3.1. Conduct a clear, structured, analytical reasoning ' 3.2. Collect, select and analyze relevant information ' 3.3.Consider problems using a systemic and holistic approach ' 3.4. Perceptively synthesize 'demonstrating a certain conceptual distance ' 3.5.Produce, through analysis and diagnosis, implementable solutions' 4. Innovation and entrepreneurship 4.1. Identify new opportunities, propose creative and useful ideas ' 4.4.Reflect on and improve .... professional practices. 5. Work effectively in an international and multicultural environment 5.1.Understand the inner workings of an organization ' 6. Teamwork and leadership 6.1. Work in a team... 7. Project management 7.1.Analyse a project within its environment and define the expected outcomes' 7.2. Organize, manage and control the process, ' 7.3.Make decisions and take responsibility for them in an uncertain world ' 8. Communication and interpersonal skills 8.1. Express a clear and structured message' 8.2. Interact and discuss effectively ' 8.3. Persuade and negotiate ' 9. Personal and professional development 9.1. Independent self-starter ' 9.4. Quick study, lifelong learner ' *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Evaluation methods :	Homeworks Case study Written exam (open book)
Teaching methods :	Lectures Exercices/PT Problem based learning Company visit Real life case study in a company
Content :	ANALYZING AND UNDERSTANDING THE EFFECT OF VARIABILITY FOR OPERATIONS MANAGEMENT Variability basics Push and Pull production systems Total quality Development of simulation models for production systems MANAGING OPERATIONS IN A PLANT

	Pull models Shop floor controls and scheduling MANAGING OPERATIONS FOR SERVICES Queueing models Non-stationary systems MANAGING OPERATIONS IN A SUPPLY CHAIN Managing inventory Managing capacity Managing time At home activities : 1 Exercices to prepare the lecture 1 Paper work
Bibliography :	: No TEXTBOOK. SLIDES compulsory . BOOK : Factory Physics, W. Hopp, M. Spearman, Mc Graw-Hill, 2008 compulsory and available on line Supports available on line are on ICAMPUS.
Other infos :	Other information Prerequisites (ideally in terms of competencies) Introduction to operations management, production management and operations research. Evaluation : Case solutions, class participation and an oral exam Support Hopp, W. and Spearman M. Factory Physics: Foundations of manufacturing management, McGraw-Hill, 2000. References : Provided during the class Internationalisation : 1 international content (does the course tackle international issues related to the course content ?) 1 international guests 1 international case study Corporate features : 1 case study 1 company visit Skills : 1 team work 1 problem solving 1 decision making 1 project management 1 critical thinking Techniques and tools for teaching and learning : 1 modelling 1 simulation 1 quantitative methods 1 mathematics
Faculty or entity in charge:	CLSM

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Business Engineering	INGM2M	5	-	
Master [120] in Business engineering	INGE2M	5	-	