



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Ingegneria
ACADEMIC YEAR	2023/2024
MASTER'S DEGREE (MSC)	MANAGEMENT ENGINEERING
SUBJECT	SUPPLY CHAIN MANAGEMENT
TYPE OF EDUCATIONAL ACTIVITY	B
AMBIT	50368-Ingegneria gestionale
CODE	14368
SCIENTIFIC SECTOR(S)	ING-IND/17
HEAD PROFESSOR(S)	AIELLO GIUSEPPE Professore Associato Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	9
INDIVIDUAL STUDY (Hrs)	144
COURSE ACTIVITY (Hrs)	81
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	1
TERM (SEMESTER)	2° semester
ATTENDANCE	Not mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	AIELLO GIUSEPPE Monday 10:00 13:00 Dicgim Ed.9 - stanza personale

DOCENTE: Prof. GIUSEPPE AIELLO

PREREQUISITES	Foundations of Statistics and Calculus, general knowledge of cost accounting methods and stock management
LEARNING OUTCOMES	knowledge of: •demand forecasting methods •aggregate planning •stocks management •logistic performance evaluation comprehension of the tradeoff between logistics cost and performance and capability of approaching supply chain optimization problems judgmental autonomy: capability of analyzing the results and selecting the most effective strategic/tactical/operational solution communication: capability of properly discussing the individual evaluation to experts and nonexperts. Learning capability of autonomous learning from scientific books and papers, and using software tools
ASSESSMENT METHODS	oral and written exams Written exams will involve the development of a complete technical and economic analysis of a supply chain, calculating its performance levels. Subsequently the student will be asked to suggest possible strategies to improve the performance levels. The exams allows a detailed evaluation of the student's knowledge level, which allows a precise evaluation. The student can finally decide whether to accept or not the grade received . Oral exam Oral exam consists of an interview to evaluate the student's knowledge level about the arguments studied. At least three questions will be made, on the overall scope of the class. The evaluation will take into account the results of the written and oral exams (half and half)
EDUCATIONAL OBJECTIVES	At the end of the class, the student will acquire knowledge and methodologies for approaching practical problems concerning supply chain optimization, which will allow him to work as a consultant or a logistic manager
TEACHING METHODS	class lessons and teamwork exercises, case studies
SUGGESTED BIBLIOGRAPHY	S. Chopra, "Supply chain management Strategy Planning and Operations", Mc Graw Hill course notes

SYLLABUS

Hrs	Frontal teaching
2	course introduction
2	demand forecast methods: general overview
4	Qualitative/quantitative methods
4	causal models, moving average, exponential smoothing
6	Aggregate Planning for the supply chain
5	Inventory management for the supply chain
5	Strategies to respond to predictable and unpredictable variability
6	postponement, quick response, component commonality strategies
6	mass customization
5	supply chain coordination
Hrs	Practice
10	demand forecasting exercises
8	aggregate planning exercises
10	supply chain design and management - performance analysis
8	coordination of a supply chain - exercises and case studies