COURSE: OPERATIONS MANAGEMENT
ACADEMIC YEAR: 2019/2020
TYPE OF EDUCATIONAL ACTIVITY: Characteristic
TEACHER: FABIO FRUGGIERO

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Language: Italian/English

ECTS: 9 n. of hours: 81 (48 class) + 33 (practice)
Campus: Potenza
School: School of Engineering
Program: MME

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES
LEARNING OUTCOMES
On completion of the module a typical student should be able to:

Knowledge and Understanding:
- Understand the main concepts and terminology of operations strategies related to goods and services
- Understand the principles and rules of planning and management of operations

Intellectual skills:
- Analyze and Synthetize strategies for product design and process selection - services
- Analyze and Synthetize methods to manage and optimize the production planning and scheduling of goods and services
- Analyze the element of an Enterprise Resource Planning System
- Analyze the strategies of forecasting, aggregate sales and operations Planning, Inventory Control, Material Requirement Planning, Operations Scheduling
- Analyze and Synthetize the principles of JIT and Lean Production
- Analyze and Synthetize strategies for supply chain design and planning
- Analyze and Manage the Project Management principles

Practical Skills:
- Create modules for performance management, forecasting, cost management, aggregate planning, Inventory control
- Realize a MRP system
- Specify Enterprise Resource Planning functionalities
- Realize a Business Plan

Transferable Skills:
- Apply ERP
- Manage Projects

PRE-REQUIREMENTS
A good knowledge of the Industrial Systems Engineering topics is strictly required

SYLLABUS
Sintetizzare in lingua inglese i contenuti riportati nella scheda in lingua in italiana.

TEACHING METHODS
The course arranges 32 hours of practical exercises to be performed in the classroom and in groups (no more than 5 per group) on real test instances. There are a total of 8 exercises; 48 hours of frontal teaching. There will be ONE or MORE VISITS to REAL SYSTEM; EXERCISES and PROJECT proposal; external manager talking.

EVALUATION METHODS
The evaluation method is about: EXERCISE elaboration; Innovation PROJECT and ORAL discussion. The weight of the practical exercises and project test on the overall evaluation is 0.3. The weight of the oral discussion is 0.7. The EXERCISEs (weight 0.3) are about: a) performance measurement in operations management; b) forecasting methods; c) Planning and Production BoM; d) Full and Direct cost; e) Aggregate Planning analysis; f) MRPI and MRPII; g) logistics and supply chain problems; h) Project Management. The INNOVATION PROJECT (weight 0.7) concerns technical and financial analysis in an innovative, based on personal idea, proposal. The ORAL discussion starts from the quality of exercise; it discusses about the innovation idea and the project elaboration; It requires about optimal strategies for operations management. The final score of the is the weighted results between tests and oral performance. If the written exam is insufficient it is not denied access to the oral exam. Integration and learning rights are guaranteed.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL
Handmade notes and duplicated lectures notes with recommended bibliography for thorough analysis:
- Fogarty, Blackstone et al., : Production & Inventory Control. South-Western Publishing group, 2004.

INTERACTION WITH STUDENTS
Students are invited to use online material. At starting it is required a registration (Name and Surname and email are needed) to a common service. It has been planning tutoring till two hours after the teaching calendar. Students can contact the teacher directly by email and phone/cell number. It is generally guaranteed tutoring long over the daily time.
EXAMINATION SESSIONS (FORECAST)¹
06/02/2020; 20/02/2020; 26/03/2020; 30/04/2020; 18/06/2020; 09/07/2020; 30/07/2020; 17/09/2020; 22/10/2020; 26/11/2020; 17/12/2020

SEMINARS BY EXTERNAL EXPERTS    YES □ NO □

BOOKS RECOMMENDED FOR READINGS:


¹ Subject to possible changes: check the web site of the Teacher or the Department/School for updates.