UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Ingegneria
ACADEMIC YEAR	2020/2021
MASTER'S DEGREE (MSC)	MANAGEMENT ENGINEERING
SUBJECT	BUSINESS PROCESS MANAGEMENT
TYPE OF EDUCATIONAL ACTIVITY	B
AMBIT	50368-Ingegneria gestionale
CODE	18537
SCIENTIFIC SECTOR(S)	ING-IND/35
HEAD PROFESSOR(S)	BRUCCOLERI MANFREDI Professore Ordinario Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	9
INDIVIDUAL STUDY (Hrs)	144
COURSE ACTIVITY (Hrs)	81
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	1
TERM (SEMESTER)	1° semester
ATTENDANCE	Not mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	

DOCENTE: Prof. MANFREDI BRUCCOLERI

PREREQUISITES	Basic knowledge of manufacturing operations and operations management. Basic knowledge of cost accounting. Basic knowledge of business information systems.
LEARNING OUTCOMES	Knowledge and understanding The student, at the end of the course, will have acquired the knowledge and learnt the methodologies for mapping, analyzing and redesigning business processes by guaranteeing the effectiveness and efficiency of business projects to meet new market demands, regulatory requirements or compliance with new regulations, and requirements related to acquisitions or mergers with other companies. The student will be able to understand issues related to the BPM related issues such as Business Process Rengineering, Knowledge Management, Lean Thinking and Information System Management. Applying knowledge and understanding The student, at the end of the course, will be able to apply theoretical knowledge about process management through a number of specific modelling techniques and, in more detail, enterprise modelling techniques (especially the methodologies IDEF0 and BPMN), the information system analysis and design (in particular the Unified Modelling Language - UML) and process simulation modelling for the evaluation of the WHAT-IF type and performance analysis of a business process (in particular the discrete event simulation). In addition, the student will use some software tools that support the modelling of business processes through the techniques stated above. In particular 1) MICROSOFT "Visio"; 2) BIZAGI "Process Modeller"; 3) ROCKWELL SOFTWARE "Arena Simulation Modelling" Making judgments The student will have acquired the ability to make decisions concerning the design and analysis of business processes and measure and critically assess the quality of a process, to enhance the positive aspects and to make suggestions for improvement based on the principles of re-engineering and technical guidance and tools acquired during the course. communication skills Learning ability Given the speed with which in recent years have been and continue to develop new standards of modelling and mapping / process analysis techniques, the student, at the end of the course, thanks to basic concepts and methodological background developed, will be able to easily learn new modelling languages and analysis approaches to the study of business processes.
ASSESSMENT METHODS	There are four separate assessments, each expressed in thirtieth. The final grade is the weighted average of these four evaluations: 1) Group Project - 50%; 2) Presentation of own Group Project - 5%; 3) Discussion of classmates' Group Project - 5%; 4) Oral examination - 40%. The criteria for each assessment are: 1) Criteria for assessing the GROUP PROJECT: respect of due dates and templates of the five required deliverables; Project idea, Plan of Attack; Description of the Company and its business processes, included supply chain processes; Mapping and Modelling of the selected business process and the information system (IDEF0; BPMN, UML); Qualitative and quantitative analysis (ARENA) of the business process; Ideas for improvement; Mapping and modelling of TO-BE process; Statistical analysis of the results and comparison with the AS-IS model. 2) Criteria for assessing the GROUP PROJECT PRESENTATION: Coherence with the project content, objective and results; Perceived level of competence related to the project subject; Perceived level of competence related to BPM; Linguistic and oral speech attitude; Quality of graphical elements. 3) Criteria for assessing the DISCUSSION OF OTHER GROUP PROJECT; Breath and depth of the analysis; Quality of the analysis in relation with the project general issues (project idea, plan of attack, KPI, coherence of TO-BE with plan of attack, etc…); Quality of the analysis in relation with technical aspects (reported anecdotal evidences; level of details od supply chain and value chain description; process models' technical consistency, etc…) 4) Criteria for assessing the ORAL EXAMINATION. Level of knowledge about BPM techniques; Level of knowledge of BPM as a managerial approach; Level of knowledge about discrete event simulation.
EDUCATIONAL OBJECTIVES	The student, at the end of the course, will have acquired the knowledge and learnt the methodologies for mapping, analysing and redesigning business processes by guaranteeing the effectiveness and efficiency of business projects to meet new market demands, regulatory requirements or compliance with new

	regulations, and requirements related to acquisitions or mergers with other companies.
TEACHING METHODS	Teacher lectures, classroom exercises, group project, students' presentation, case study discussion. Active learning through a team project on Business Process Reengineering
SUGGESTED BIBLIOGRAPHY	ENGLISH Textbooks •Business Process Management, J. Neston and J. Nelis, ROUTLEDGE, 3rd Ed. 2014 •Managing Business Process Flows, R. Anupindi, S Chopra, S. Deshmukh, J. Van Mieghem, E. Zemel, PEARSON PRENTICE ALL, 2006 •www.omg.org •Course slides and website TESTI IN ITALIANO •Gestione per processi e Knowledge Management, S. Tonchia, A. Tramontano, F. Turchini, Ed. Il Sole 24 ore, 2003 •Fondamenti di UML, Jason T. Roff, McGraw Hill, 2003. •Appunti e dispense distribuite durante il corso (www.unipa.it/ manfredi.bruccoleri)

SYLLABUS

Hrs	Frontal teaching
2	Introduction to the Course and to the class project
3	Business Process Management: Introduction
3	Business process engineering and modelling
2	Enterprise Modelling Techniques: IDEF0
5	BPM and Knowledge Management. Business Process Reengineering
2	Enterprise Modelling Techniques: BPMN
2	BPM and Information System Modeling
6	Information System Modelling Techniques: UML
4	Business Process Flow Analysis
11	Process Simulation Modelling Techniques: Arena Simulation Package

Hrs	Practice
3	SIPOC and Business process mapping
3	IDEF0 business process modeling
3	BPMN workflow modeling
3	UML modeling
6	ARENA simulation

Hrs	Workshops
23	Revision, Discussion and Presentation of BPR projects