Syllabus

Descrizione corso

Titolo insegnamento	Gestione e organizzazione delle funzioni tecniche operative
Codice insegnamento	27342
Titolo aggiuntivo	
Settore Scientifico-Disciplinare	ECON-07/A
Lingua	Tedesco
Corso di Studio	Corso di laurea in Economia e Management
Altri Corsi di Studio (mutuati)	
Docenti	prof. dr. Rudolf Heinrich Kuhn, Heinrich.Kuhn@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/977
Assistente	
Semestre	Primo semestre
Anno/i di corso	3
CFU	6
Ore didattica frontale	36
Ore di laboratorio	9
Ore di studio individuale	
Ore di ricevimento previste	
Sintesi contenuti	The Operations Management course covers the modern concepts of production and logistics management, service operations and supply chain management and covers the following topics: Project planning, plant/warehouse siting and production facility design Medium and short-term production planning and just-in-time systems

	Inventory management, transport planning and route planning for vehicles
Argomenti dell'insegnamento	The course is part of the subject-specific teaching programme and belongs to the Department of Business Administration. The course provides an introduction to modern methods of operations management (production and logistics management as well as service operations). Students will learn the main approaches to decision support in the design and operation of production and logistics systems in industrial and service operations. The main aspects of service operations are discussed. The following contents are covered, among others: 1. conceptual foundations of production, logistics and supply chain management (SCM) 2. models and model-based planning, linear optimisation 3. project planning (network planning technique) 4. basics of network planning 5. location planning on the level 6. location planning for given potential locations 7. configuration and operation of flow production systems and production centres (production islands) 8. basics of sales planning 9. time series-based demand forecasting 10. aggregated production planning (medium-term production planning) 11. determination of material requirements 12. lot size and order quantity planning 13. inventory management and safety stocks 14. round trip and route planning
Parole chiave	Network planning, production programme planning, resource planning, batch size planning, logistics
Prerequisiti	The target group is 2nd and 3rd year students on the Bachelor of Science in Economics and Management Sciences (Laurea di primo livello). Basic knowledge of general business administration is required.
Insegnamenti propedeutici	
Modalità di insegnamento	Classroom teaching with interactive content and exercises Discussions, exercises, case studies and homework

Obbligo di frequenza	Not mandatory but recommended
Obiettivi formativi specifici e risultati di apprendimento attesi	ILO (Intended Learning Outcomes) ILO 1 Knowledge and understanding ILO 1.1 Knowledge of the methods of corporate decision-making and strategic management ILO 1.2 Understanding of social responsibility, consumer protection, sustainable marketing ILO 1.3 Knowledge of concepts, models and tools for critically analysing business and corporate strategies ILO 2 Ability to apply knowledge and understanding ILO 2.1 Be able to correctly apply management principles and theoretical models as well as empirical analytical tools to complex problems in typical management situations in the appropriate context ILO 2.2 be able to apply appropriate concepts, models, tools and techniques to analyse markets, market strategies, programmes and activities in teamwork and communicate research findings in accordance with international professional standards in three languages: Italian, German and English ILO 3 Making judgements ILO 3.1 select the most appropriate quantitative and qualitative methods of analysis ILO 3.2 combine information and analytical methods, also using modern software packages, in a logical reasoning process to find a solution ILO 4 Learning skills ILO 4.1 critically analyse and integrate data, information and future experiences, including using advanced software packages
Obiettivi formativi specifici e risultati di apprendimento attesi (ulteriori info.)	After completing the course, students will - be familiar with the basic approaches of modern production and logistics management as well as service operations (knowledge)

	and - understand the central role these approaches play in solving decision-making problems in the area of production and logistics in production and service operations (understanding) and - have the ability to apply the methods learnt in operational practice (application of knowledge and understanding).
Modalità di esame	Written examination and project work: Written examination with examination questions (ILOs assessed: 2, 3) and written group work (case studies and homework) (ILOs assessed: 1-4) Case studies and homework can also be completed without being present.
Criteri di valutazione	(1) Final exam with 70%, (2) case studies and homework with 20%, (3) participation with 10%. Examination (1) must be completed with a positive grade regardless of all other performances. Participation (3) can be replaced by a separate term paper for students who do not attend the lectures.
Bibliografia obbligatoria	Günther, H.-O. and H. Tempelmeier, Supply Chain Analytics, 13th ed., Norderstedt, (Books on Demand) 2020; formerly Günther/Tempelmeier, Produktion und Logistik (Every participant should have this book available.) Günther, H.-O. and H. Tempelmeier, Übungsbuch Supply Chain Analytics: Operations Management und Logistik, 10th ed., Norderstedt (Books on Demand) 2020
Bibliografia facoltativa	Chopra, S., Supply Chain Management: Strategy, Planning, and Operation, 7th edition, Upper Saddle River (Prentice Hall) 2018. Bordoloi S., Fitzsimmons, J.A., Fitzsimmons, M.J., Service Management: Operations, Strategy, Information Technology, 10th edition, Boston (McGraw-Hill/Irwin) 2022. Nahmias, St., Production and Operations Analysis, 8th edition, Boston (McGraw Hill) 2021.

	Render, B.; R.M. Stair and M.E. Hanna, Quantitative Analysis for Management, 14th edition, Upper Saddle River (Prentice Hall), 2024. Silver, Edward A., David F. Pyke and Douglas J. Thomas, Inventory and Production Management in Supply ChainsSystems, Taylor & Francis, 4th, 2017 Tempelmeier, H., Helber, S., und H. Kuhn (2023). Konfigurationsplanung von Produktionssystemen. In: Furmans, K., Henke, M., Tempelmeier, H., ten Hompel, M., Schmidt, T. (eds) Handbuch Logistik. Springer Vieweg, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-54476-7_11-1
Altre informazioni	The slides for the course, exercise material and sample exams will be made available.
Obiettivi di Sviluppo Sostenibile (SDGs)	Istruzione di qualità, Buona occupazione e crescita economica, Partnership per gli obiettivi, Utilizzo responsabile delle risorse, Lotta contro il cambiamento climatico, Innovazione e infrastrutture