Syllabus

Course Description

Course Title	Business Analytics (curr. DCA)
Course Code	25458
Course Title Additional	
Scientific-Disciplinary Sector	ECON-06/A
Language	English
Degree Course	Master in Accounting and Finance
Other Degree Courses (Loaned)	loaned to LP stream (code: 25459)
Lecturers	Prof. Nicola Dalla Via, Nicola.DallaVia@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/41428
Teaching Assistant	
Semester	First semester
Course Year/s	2
CP	6
Teaching Hours	36
Lab Hours	-
Individual Study Hours	-
Planned Office Hours	18
Contents Summary	The course provides an advanced perspective on managerial accounting, focusing on how financial and non-financial information supports decision-making, control, and performance management. The course explores costing techniques, budgeting and variance analysis, transfer pricing, and performance measurement across different organizational contexts. Analytical tools such as predictive modeling, simulations, and ERP/BI applications are introduced as complements to accounting concepts, enabling students to address complex managerial challenges with greater insight.

Course Topics	This course integrates advanced managerial accounting topics with foundational elements of business analytics and performance measurement. It focuses on preparing, evaluating, and interpreting financial and non-financial information to support managerial decision-making and control across different types of organizations (e.g., manufacturing, service, for-profit, and non-profit). Topics covered include advanced cost allocation techniques (such as Time-Driven Activity-Based Costing), variance analysis, fundamentals of predictive analytics, Monte Carlo simulations and uncertainty, interactive data visualizations for managerial decision-making, and the recording of basic transactions in an Enterprise Resource Planning (ERP) system.
Keywords	Managerial accounting, performance measurement, costing techniques, managerial decision-making
Recommended Prerequisites	
Propaedeutic Courses	
Teaching Format	The course combines frontal lectures, problem-solving exercises, and case study discussions. In-class explanations will be integrated with the application of concepts through practical exercises and managerial cases. Active participation is expected and encouraged throughout the course.
Mandatory Attendance	Although course attendance is not compulsory, it is highly recommended
Specific Educational Objectives and Learning Outcomes	ILO (Intended Learning Outcomes) ILO 1 – Knowledge and Understanding: ILO 1.1 Knowledge of business-economic models and performance measurement for planning and management control, as well as internal and external auditing models and methods. ILO 1.2 Knowledge of business-economic models and tools for managing companies, whether family-owned or small-sized, as well as internationally operating firms. ILO 1.3 Knowledge of management topics that characterise the professions of financial analyst, portfolio manager, risk manager, and consultant.

	ILO 2 – Applying Knowledge and Understanding: ILO 2.1 Ability to develop and integrate the results of economic-financial communication into corporate decision-making models. ILO 2.2 Ability to communicate and interact competently with managers of different functional areas, with financial markets, and with professionals in corporate and tax law. ILO 2.3 Ability to critically analyse and formulate solutions to complex problems in interdisciplinary contexts, both nationally and internationally, in organisations of small or large size. ILO 2.4 Ability to integrate the results of economic-financial communication and quantitative data analysis into corporate decision-making models. ILO 2.5 Ability to frame and assess organisational situations and problems from a multidisciplinary perspective, integrating business, economic, legal, financial, and statistical-mathematical disciplines. ILO 2.6 Ability to communicate and interact with managers of different functional areas, with financial markets, and with professionals in corporate and tax law. ILO 3 – Making Judgements: ILO 3.1 Ability to apply acquired knowledge to make strategic and operational decisions and to solve administration and finance problems in companies, intermediaries, and financial markets, considering multiple perspectives of analysis (economic, legal, financial, strategic, managerial). ILO 3.2 Ability to select data and use appropriate information to describe a problem related to the management of companies, intermediaries, and financial markets. ILO 3.3 Ability to relate models and empirical evidence in the study of companies, intermediaries, and financial markets. ILO 4 – Communication Skills: ILO 4 Ability to communicate effectively, both orally and in writing, the specialised content of individual disciplines, using different registers depending on the audience and the communicative and educational purposes, and to evaluate the educational impact of such communication.

	ILO 5 – Learning Skills: ILO 5.1 Ability to develop general models based on the phenomena studied
Specific Educational Objectives and Learning Outcomes (additional info.)	Upon successful completion of this course, students will be able to: • Apply advanced managerial accounting and business analytics techniques to support decision-making and control in diverse organizational contexts. • Interpret and integrate financial and non-financial information to drive corporate performance and evaluate strategic outcomes. • Utilize appropriate analytical frameworks and data analysis methods to investigate and solve complex managerial problems. • Demonstrate effective problem-solving, computational, and communication skills through the preparation of managerial reports that support performance management. Knowledge and understanding: • Advanced knowledge and understanding of managerial dilemma´s related to the measurement and management of performance in different types of organizations • Understand how companies generate, manage, and analyse internal financial and non-financial information using ERP and BI systems Applying knowledge and understanding: • Ability to apply advanced management accounting concepts and techniques in several business settings • Ability to integrate financial information with non-financial information to effectively support managerial decision-making and drive/control corporate performance • Ability to apply data analysis tools and techniques to extract financial data, analyse financial statements and internal reports, and visualize complex accounting data Making judgments: • Ability to search for, evaluate and suggest appropriate analytical frameworks to diagnose and solve multifaceted managerial problems • Ability to analyse complex business settings and apply appropriate problem solving, computational and communication

	skills • Preparation and analysis of managerial reports that aid in measuring/driving corporate performance and evaluating managerial performance Learning skills: • Ability to prepare a managerial report to communicate the results of a data analysis • Provide relevant information for decision-making, as well as solutions in response to specific issues related to the measurement and management of corporate and managerial performance
Assessment	For students who actively engage in course activities, the final grade is based on a combination of: • Optional Midterm (ILOs 1.1-1.3, 2.1, 2.4) • Assignments (ILOs 2.1, 2.3, 2.4, 2.5, 3.1, 3.2, 4, 5.1) • Final Exam, consisting of multiple-choice and essay questions (ILOs 1.1-1.3, 2.1, 2.3, 2.4, 2.5, 3.1-3.3, 5.1) These assessment components are designed to evaluate both the understanding of individual topics and the ability to integrate concepts across the course. The midterm, assignments, and final exam collectively assess students' knowledge acquisition, comprehension, and application of managerial and financial accounting principles to support managerial decision-making.
Evaluation Criteria	Non-attending students: • Final Exam (combination of multiple-choice and essay questions): 100% of the final grade Attending students (who actively engage in course activities): • Optional Midterm • Assignments • Final Exam (combination of multiple-choice and essay questions) To pass the course, students must achieve a passing grade in the Final Exam, regardless of performance in the midterm or assignments. Grades earned in the Optional Midterm and Assignments are valid for one academic year.

Required Readings	The detailed list of required readings and learning materials will be announced at the beginning of the course and made available on the OLE platform. Zimmerman, J. L. (2017). *Accounting for Decision Making and Control* (9th International ed.). McGraw-Hill Education, ISBN: 978-1-259-25500-7 or Zimmerman, J. L. (2020). *Accounting for Decision Making and Control* (10th International ed.). McGraw-Hill Education, ISBN: 978-1-260-56547-8
Supplementary Readings	
Further Information	
Sustainable Development Goals (SDGs)	Decent work and economic growth, Quality education