

---

# Benchmarking and Management Control

Professor: Mircea Epure

E-mail: mircea.epure@upf.edu

Office hours: by appointment

Course Type: Elective

Credits: 4

Term: 2<sup>nd</sup>

---

## Course Description

Benchmarking and Management Control is a second-term MSc course at the UPF Barcelona School of Management. It is a core course for students specializing in Business Analytics, and as an elective course for students specializing in general Management, Finance, Marketing, and Entrepreneurship.

Seeking practices for organizational improvement—benchmarking—is a fundamental managerial task commonly characterized as a problem solving activity, which can be implemented through responses to business analytics feedback. This activity is closely related to management control, which combines organizational design with performance measurement and reward systems at the divisional and individual levels of the organization.

## Objectives

The course provides participants with tools to assess the performance of organizations from different sectors. Participants are prepared for real-life managerial analyses that are based on concepts such as profitability, productivity, price indices and output and input mix. Furthermore, the performance measures consider issues such as the characteristics of organizational design, and the assessment and control of processes and employees in decentralized firm divisions. All topics include numerical examples and applications with firm data from various industries and countries.

## Methodology

The course comprises twenty 90-minute lectures, which combine lecturing with general debates and applied discussions on business cases and exercises. Participants will also engage in presentations of reports on cases or project assignments. Activities will require both individual and group work.

The competences, the learning outcomes, the assessment elements and the quality of the learning process included in this Teaching Plan will not be affected if during the

academic trimester the teaching model has to switch either to an hybrid model (combination of face-to-face and on-line sessions) or to a complete on-line model.

## Evaluation criteria

Grading will be done through active class participation (30%), group analyses/presentations of cases (30%) and a final project (40%). For specific information on the final project, please refer to the document titled "Guidelines for the final report".

Students are required to attend 80% of classes. Failing to do so without justified reason will imply a Zero grade in the participation/attendance evaluation item and may lead to suspension from the program

Students who fail the course during the regular evaluation are allowed ONE re-take of the evaluation, in the conditions specified above. If the course is again failed after the retake, the student will have to register again for the course the following year.

In case of a justified no-show to an exam, the student must inform the corresponding faculty member and the director(s) of the program so that they study the possibility of rescheduling the exam (one possibility being during the "Retake" period). In the meantime, the student will get an "incomplete", which will be replaced by the actual grade after the final exam is taken. The "incomplete" will not be reflected on the student's Academic Transcript.

Plagiarism is to use another's work and to present it as one's own without acknowledging the sources in the correct way. All essays, reports or projects handed in by a student must be original work completed by the student. By enrolling at any UPF BSM Master of Science and signing the "Honor Code," students acknowledge that they understand the schools' policy on plagiarism and certify that all course assignments will be their own work, except where indicated by correct referencing. Failing to do so may result in automatic expulsion from the program."

## Contents

### Block 1: Introduction to benchmarking measures

1. Definition of performance monitoring and benchmarking in competitive settings
  - Monitoring (internal assessments)
  - Benchmarking (external assessments)
2. Profitability and productivity changes
  - Decision making for improved profitability; applications
  - Absolute and relative changes (index numbers) with and without prices
  - Multifactor productivity, profit margins, output and input prices, output-input mix

Block 2: Multidimensional benchmarking and applications

3. Benchmarking in multidimensional settings
  - Output maximization and input minimization, fixed and variable inputs
  - Using productivity and efficiency to set targets and reform operations
4. Business applications of benchmarking assessments
  - Business applications of benchmarking (e.g., acquisitions, corporate social responsibility)
  - Public sector applications of benchmarking (e.g., regional spending for entrepreneurship)

Block 3: Organizational architecture and performance control

5. Designing organizational architecture
  - Determinants of the architecture of markets and firms
  - Decision rights: centralization versus decentralization
6. Divisional performance evaluation and control
  - Divisional performance: cost, expense, revenue, profit and investment centers
  - Transfer pricing and trade-offs between decision management and control
7. Measuring internal business processes and employee performance
  - Relative, objective and subjective measures
  - Within- and across-firms applications
8. Assessing management practices across the world
  - Firm- and institutional-level determinants of performance measures
  - Applications -using econometric techniques- with real data from international management surveys

## Optional Bibliography and Software

*On managerial economics and management control:*

Brickley, J.A., Smith Jr., C.W., Zimmerman, J.L. 2016. *Managerial Economics and Organizational Architecture*. 6th ed., McGraw-Hill.

Kaplan, R.S., Atkinson, A.A. 2000. *Advanced Management Accounting*. 3th ed., Prentice Hall, Upper Saddle River.

*On methods and applications:*

Balk, B.M., 2003. The residual: On monitoring and benchmarking firms, industries, and economies with respect to productivity. *Journal of Productivity Analysis* 20(1), 5-47.

Bogetoft P., Otto, L., 2011. Benchmarking with DEA, SFA and R. Springer, New York.

*Websites related to course content:*

Interactive benchmarking: <http://www.ibensoft.com>

World Management Survey: <https://worldmanagementsurvey.org>

*Software related to the content of the course:*

R package 1: “nonparaeff: Nonparametric Methods for Measuring Efficiency and Productivity” (average users): <https://cran.r-project.org/web/packages/nonparaeff/index.html>

R package 2: “Benchmark and frontier analysis using DEA and SFA” (average users): <https://cran.r-project.org/web/packages/Benchmarking/index.html>

EMS: Efficiency Measurement System (novice users): <http://www.holger-scheel.de/ems/>

Stata (recommended applied econometrics software): <https://www.stata.com>

## Bio of Professor

Mircea Epure is Associate Professor in the Dept. of Economics and Business at the Universitat Pompeu Fabra (UPF). He is the Academic Director of the Business Analytics MSc track and Dean for the UPF-BSM within the Quantitative Techniques for Economics & Management Masters Network. Mircea is also Affiliated Professor at the Barcelona Graduate School of Economics. He has a PhD degree in Business Economics and Administration from U. Autònoma de Barcelona (a European Doctoral Program jointly organized with Växjö U.). Before joining UPF, he has visited Växjö U. in Sweden and IESEG School of Management in France, and has taught at Toulouse Business School.

Mircea’s research focuses on corporate governance, and management accounting and control. His work was conceded national and regional grants, cited in *The Oxford Handbook of Corporate Law and Governance* and World Bank studies, nominated for an award by the International Corporate Governance Society, and awarded a prize/grant by the CEIBS Cathay Cross-border Private Equity Research Fund. Mircea’s articles have been featured on the Columbia Law School Blue Sky Blog and in the press releases of the Strategic Management Society.

Find out more at [mirceaepure.com](http://mirceaepure.com).