

---

# Benchmarking and Management Control

Professor: Mircea Epure

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, Entrepreneurship, Finance, and Marketing.

Seeking practices for organizational improvement—benchmarking—is a fundamental managerial task for problem solving, which can be implemented through responses to business analytics feedback. It 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.

## Specific Competencies

SC3. Solve managerial problems through the use of analytical and research techniques.  
SC4. Acquire the skills for the design and implementation of problem-solving models, based on insights from the social sciences.

SC7. To integrate relevant and current scientific research to generate insights in support of business practice.

SC8. Apply the techniques and theories acquired in the Master's Degree to solve problems relevant to the business world.

## 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: Benchmarking measures and managerial applications

1. Definition of performance monitoring and benchmarking in competitive settings
  - Monitoring (internal assessments)
  - Benchmarking (external assessments)
  - Output maximization and input minimization
2. Profitability and productivity changes in multidimensional settings
  - Decision making for improved profitability
  - Absolute and relative changes (index numbers) with and without prices
  - Multifactor productivity, profit margins, output and input prices, output-input mix
3. Business applications of benchmarking
  - Using productivity and efficiency to set targets and reform operations
  - Business applications of benchmarking (e.g., acquisitions, corporate social responsibility)
  - Public sector applications of benchmarking (e.g., regional spending for entrepreneurship)

### Block 2: Organizational architecture and performance control

4. Designing organizational architecture
  - Determinants of the architecture of markets and firms
  - Decision rights: centralization versus decentralization
5. Divisional performance evaluation and control
  - Divisional performance: cost, expense, revenue, profit and investment centers
  - Transfer pricing and trade-offs between decision management and control
6. Measuring internal business processes and employee performance
  - Relative, objective and subjective measures
  - Within- and across-firms applications
7. 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. *J. Prod. Anal.* 20, 5-47.
- Bogetoft P., Otto, L., 2011. *Benchmarking with DEA, SFA and R*. Springer, NY.

Recommended software:

- RStudio: <https://www.rstudio.com>
- R package 1: "Benchmark and frontier analysis using DEA and SFA" (average users): <https://cran.r-project.org/web/packages/Benchmarking/index.html>
- R package 2: "nonparaeff: Nonparametric Methods for Measuring Efficiency and Productivity" (average users): <https://cran.r-project.org/web/packages/nonparaeff/index.html>

Interesting websites related to the course:

- World Management Survey: <https://worldmanagementsurvey.org>
- Interactive benchmarking: <http://www.ibensoft.com>

## Bio of Professor

**Mircea Epure** is Serra Hunter Associate Professor at the Department of Economics and Business at Universitat Pompeu Fabra (UPF). He is also Affiliated Professor at the Barcelona School of Economics and the UPF-Barcelona School of Management, where he directs the Business Analytics MSc track and acts as QTEM Dean.

Epure is interested in governance and control, entrepreneurship, and corporate performance. His research was published in leading business and economics journals. His work attracted funding from national institutions, La Caixa Foundation, and the CEIBS Cathay Cross-border Private Equity Research Fund. It was cited in The Oxford Handbook of Corporate Law and Governance and World Bank studies, and nominated for an award by the International Corporate Governance Society. Epure's articles have been featured on the Columbia Law School Blue Sky Blog, Atlanta Fed Policy Hub, and in the press releases of the Strategic Management Society, among others.

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