

## Course Descriptions None 2022-2023

Course Title Quantitative Introduction to Business  
Course Code EBC1036  
ECTS Credits 6,5  
Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	5-9-2022	21-10-2022		X		X	L

Level Introductory  
Coordinator Stan van Hoesel For more information:s.vanhoesel@maastrichtuniversity.nl  
Language of instruction English

Goals In this course the student will get an overview of the concept of running a business, including the functional areas. In each area we focus on quantitative modelling and the decision making process. Specific learning goals are

- 1.Get an overview of all functional areas of running a business, and their role in the process.
- 2.For three specific functional areas a more in-depth discussion is integrated with the course.
- 3.The use of basic quantitative (both statistical and OR) techniques will be incorporated in the course mainly for showing where quantitative methods can be used to model and solve real-life business problems.

Description PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. A RE-EMERGENCE OF THE CORONAVIRUS AND NEW COUNTERMEASURES BY THE DUTCH GOVERNMENT MIGHT FORCE COORDINATORS TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS.

This course introduces the most important managerial aspects of businesses, with the aim to provide the student with a clear overview of all functions that play a role in running a business. We discuss the functional areas within business with an emphasis on operations, and marketing. We will use a quantitative approach in the sense that for each of the areas one or two concepts are translated into models that can be solved with mathematical and statistical tools. These tools (and their further development during the studies) form an important element of the econometrics and OR study. This course aims at placing the tools in the right perspective from a managerial point of view. The technical level of the problems will be adapted to the knowledge of high school students.

The set-up of the course is as follows:

In the weeks 1-2: introduction business management and we discuss business strategy in general.  
In the weeks 3-4 we discuss problems on a strategic level such as strategic capacity management and location decisions.  
In the weeks 5-6 we discuss problems on the tactical level such as aggregate planning and inventory management.  
In week 7 we end with problems on the operational level such as job scheduling.

Literature Operations Management, 12th ed. (Global edition) 2014, W.J. Stevenson, ISBN-13 9780077169527, ISBN-10 0077169522.

Prerequisites None.

Keywords

Teaching methods PBL / Lecture

Assessment methods Attendance / Participation / Written Exam

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation Bachelor Econometrics and Operations Research Year 1 Compulsory Course(s)