

## Course Descriptions None 2015-2016

Course Title Quantitative Business  
 Course Code EBC2025  
 ECTS Credits 6,5  
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	11-4-2016	3-6-2016			X		X

Level Intermediate  
 Coordinator Christian Kerckhoffs For more information:c.kerckhoffs@maastrichtuniversity.nl  
 Language of instruction English

Goals Learn to recognize the opportunities to apply basic tools from mathematics and inferential statistics in business.  
 Learn to implement statistical tools using the statistical software package SPSS, and to correctly interpret the results.

Description This course is devoted to refreshing, extending and actively applying the mathematical and statistical tools introduced in the first year quantitative methods courses.  
 In the mathematics part we pay attention to a number of applications of first-year mathematical tools to business economics, such as: investment under uncertainty, the CAPM-model, industrial organisation, Game Theory a.o. The purpose is twofold: to repeat and extend the first-year methods and show how they are applied on the one hand, and to get acquainted with some basic quantitative business models on the other hand.  
 In the statistics part we repeat, apply and extend all the inferential tools discussed in the first year: a.o. the one-sample t-test, the independent-samples t-test, the paired sample t-test, one-way-ANOVA, the chi-square test and regression analysis. Some new techniques, e.g. non parametric tests, logistic regression and factor analysis will be introduced. Case studies using real-life datasets that reflect business problems from a.o. marketing and finance are examined extensively. The empirical analyses are performed with SPSS, a statistical software package widely used in professional practice.

Literature Sydsaeter, Knut, and Peter J. Hammond (2012), Essential Mathematics for Economic Analysis, 4th ed., Harlow: Pearson Education.  
 Sharpe, Norean R., De Veaux, Richard D., and Paul F. Velleman (2012): Business Statistics, 2nd. Intern. Ed., New York: Pearson Education International.

Prerequisites Intermediate knowledge of mathematics and statistics, comparable to the course Quantitative Methods II, code EBC1033/1034/1035.

Teaching methods PBL / Presentation / Lecture / Assignment / Groupwork

Assessment methods 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 Economics and Business Economics Specialisation Emerging Markets	Year 2 Elective Courses
	Bachelor Economics and Business Economics Specialisation Economics and Management of Information	QE Electives
	Bachelor Economics and Business Economics Specialisation International Business Economics	Year 2 Compulsory Courses
	SBE Exchange Bachelor	Bachelor Exchange Courses
	SBE Exchange Master	Bachelor Exchange Courses
	SBE Non Degree Courses	Bachelor Courses