Course Descriptions None 2020-2021

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

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	12-4-2021	28-5-2021		L	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	PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. THE INFORMATION PROVIDED HERE IS BASED ON THE COURSE SETUP PRIOR TO THE CORONAVIRUS CRISIS. AS A CONSEQUENCE OF THE CRISIS, COURSE COORDINATORS MAY BE FORCED 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 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	Sharpe, Norean D., De Veaux, Richard D., & Velleman, Paul F. (2017), Business Statistics and Extra Texts, 3rd Intern. Ed., New York: Pearson Education International . QM1 + QM2 mathematics reader, to be downloaded on Student Portal.
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 - Economics	Year 3 Quantitative Economics Elective(s)
Bachelor Economics and Business Economics - Emerging Markets	Year 2 Elective Course(s)
Bachelor Economics and Business Economics - Emerging Markets	Year 3 Elective Course(s)
Bachelor Economics and Business Economics - Economics and Management of Information	Year 2+3 Quantitative Economics Elective(s)
Bachelor Economics and Business Economics - International Business Economics	Year 2 Compulsory Course(s)
Bachelor International Business - Emerging Markets	Year 3 Elective Course(s)
Bachelor International Business	Year 3 QE Elec(s) - Maj Accounting
Bachelor International Business	Year 3 QE Elec(s) - Maj Finance
Bachelor International Business	Year 3 QE Elec(s) - Maj Inf Mgmt
Bachelor International Business	Year 3 QE Elec(s) - Maj Marketing
Bachelor International Business	Year 3 QE Elec(s) - Maj Org
Bachelor International Business	Year 3 QE Elec(s) - Maj SCM
Bachelor International Business	Year 3 QE Elec(s) - Maj Strategy
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses
SBE Non Degree Courses	Bachelor Courses
Pre-master Economics and Strategy in Emerging Markets	Disciplinary Course(s)