Course Descriptions None 2024-2025

Course Title	R Functions and Libraries
Course Code	EBS1009
ECTS Credits	4,0
Assessment	Pass / Fail

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
3	13-1-2025	26-1-2025	C				

Level	Introductory
Coordinator	Roselinde Kessels For more information:r.kessels@maastrichtuniversity.nl
Language of instruction	English
Goals	* Students understand the R programming language and the "tidyverse" library and functions as well as RMarkdown. * Students apply the "tidyverse" functions that read, reshape, visualize and aggregate data and deliver a presentation in Rmarkdown. * Students motivate their use of the "tidyverse" functions for specific data situations. * Students evaluate and compare different uses of the "tidyverse" functions that lead to the same result and reflect upon best practices. * Students understand the importance and impact of the R programming language to different business industries and institutions. * Students understand the ethical principles of objectivity, carefulness and respect for data privacy regulations. * Students make publication quality tables and graphs summarizing their results with the "tidyverse" in R and deliver a presentation created within R Markdown. * Students know how to search for tool extensions or additional functions in R and use the help functions. * Students collaborate and brainstorm in intercultural teams.
Description	This skills training is a follow-up of the Statistics and Knowledge Discovery and Data Visualization courses and provides skills for efficient and more advanced statistical analysis of extensive business datasets. The training introduces students to the "tidyverse" package of the statistical software environment R. The tidyverse package is a collection of packages of functions, data and documentation, designed to tackle data science problems. All packages work in harmony because they share an underlying design philosophy, grammar and data structures. The training covers the core packages that provide functionality to model, transform and visualize data as well as programming tools to automate common tasks and solve new problems with greater ease.
Literature	Hadley Wickham & Garrett Grolemund (2016). R for Data Science: Visualize, Model, Transform, Tidy, and Import Data. O'Reilly, ISBN: 978-1-4919-1039-9. The book is also accessible at http://r4ds.had.co.nz/.
Prerequisites	
Keywords	
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork / Skills / Coaching
Assessment methods	Attendance / Participation / Assignment / Presentation
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 Business Analytics	Year 1 Compulsory Skill(s)