

AMSA assignment

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- Assignment: 5 page paper: problem definition, objective, data, analysis, interpretation (R-code not included)
- Put the R-code in annex
- Assignment together with the data (separate file in csv format), send by mail to eddie.schrevens@kuleuven.be at the latest 48 hours before examination time
- If data are confidential, please inform me. The best option is to change variable names to X1, X2, ... and change the data description
- Give the assignment and data your name: firstname_lastname.doc or pdf and csv
- You do not need to print the assignment or bring it to the exam
- Paper examples on Toledo
- The score on your assignment counts for $\frac{1}{4}$ of your examination score

AMSA assignment: objectives

- Show that you are able to analyse multivariate data with the methodologies for ordination, clustering and discrimination
- Demonstrate your R-skills
- Show that you can tackle the flow chain of a data science problem: define your objectives and select a multivariate analysis strategy, read data, preprocess and/or scale the data if necessary, apply multivariate statistical analyses and interpret the results
- Try to be as authentic and creative as possible in your approach. The demo programs on Toledo are just a guideline
- Show you can extend the methodologies of the lectures to a higher level concerning methodology, graphics, presentation of results, ...

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Interesting R-packages

- To boost creativity and originality
 - FactoMineR
 - vegan
 - cluster
 - caret
 - faraway

Forbidden data

Data from the following websites can not be used in any assignment:

University California Irving Machine Learning Repository

<https://archive.ics.uci.edu/ml/index.php>

<https://kagge datasetsarchive.ics.uci.edu/ml/index.php>

Kaggle: Your Home for Data Science

<https://www.kaggle.com/>