

Advanced statistical techniques in Speech Language and Hearing Sciences (D012792)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size *(nominal values; actual values may depend on programme)*

Credits 5.0 **Study time** 150 h **Contact hrs** 30.0 h

Course offerings and teaching methods in academic year 2020-2021

A (semester 2) Dutch Gent seminar: practical PC room classes 27.5 h

Lecturers in academic year 2020-2021

Coorevits, Pascal GE39 lecturer-in-charge

Offered in the following programmes in 2020-2021

	crdts	offering
Master of Science in Teaching in Health Sciences (main subject Medical Sciences)	5	A
Master of Science in Speech Language and Hearing Sciences (main subject Audiology)	5	A
Master of Science in Speech Language and Hearing Sciences (main subject Logopaedics)	5	A

Teaching languages

Dutch

Keywords

univariate analysis, multivariate analysis, data analysis on its own, critical reflection about simple statistical methods in scientific literature, aspects of research datamanagement (scientific integrity, DMP)

Position of the course

Goal of this course is to learn students general research methods so they will be able to analyse research data, interpret results and report conclusions in a scientific way. Furthermore, students should reflect critically about the used basic statistical analysis in scientific literature.

Contents

In this course some statistical techniques will be analyzed in a more profound way and special attention will be drawn on setting up a simple data protocol and reflect critically on the used analysis in scientific literature. Other topics: multivariate analysis. Repetition/extension univariate statistical analysis, (Logistic and multiple) regression, ANOVA, (M)ANCOVA, Factor analysis, Validity and reliability, import from Excel.

Initial competences

Basic knowledge in statistics is strongly recommended

Final competences

- 1 Students understand and can explain advanced statistical techniques
- 2 Students are able – based on arguments – to choose a statistical technique
- 3 Students are able to perform statistical analysis
- 4 Students are able to interpret results and come to a profound conclusion
- 5 Students are able to present results in a scientific (written) way
- 6 Students are able to set up of a simple statistical protocol (part of the datamanagementplan), to perform independently a complete statistical analysis and report the results in a scientific way
- 7 Students are able to reflect critically on the used statistical analyses in scientific literature

Conditions for credit contract

This course unit cannot be taken via a credit contract

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Seminar: practical PC room classes

Extra information on the teaching methods

Integrated lectures (theoretical and practical) with SPSS. They also have to critically reflect and present about the methods of the self-chosen scientific article. Guidance is foreseen

Learning materials and price

Statistische Gegevensverwerking met behulp van IBM SPSS, P. Coorevits, Buysse H en De Schepper E. (kostprijs +/- 20 euro)

References

Course content-related study coaching

Personal contact during and after courses or via Ufora (discussion forum).

Evaluation methods

continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation

Assignment

Possibilities of retake in case of permanent evaluation

not applicable

Calculation of the examination mark