

Methodology of Scientific Research (D002680)

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	<i>(nominal values; actual values may depend on programme)</i>		
Credits 6.0	Study time 162 h	Contact hrs	75.0 h

Course offerings and teaching methods in academic year 2020-2021

A (semester 2)	Dutch	Gent	lecture	23.75 h
			seminar: practical PC room classes	21.25 h

Lecturers in academic year 2020-2021

Coorevits, Pascal	GE39	lecturer-in-charge
Meeus, Mira	GE37	co-lecturer
Van Oosterwijck, Jessica	GE37	co-lecturer

Offered in the following programmes in 2020-2021

	crdts	offering
Bachelor of Science in Rehabilitation Sciences and Physiotherapy	6	A

Teaching languages

Dutch

Keywords

methodology
biostatistics
Evidence Based Medicine

Position of the course

In this course the basic principles of statistics and research methodology and their relevance and application in health care are explained.

Contents

Partim Introduction to EBM:

- Evidence Based Medicine
- Types of research designs
- Basic principles of searching literature

Partim Statistics:

- Introduction to statistics
- Descriptive statistics
- Inferential statistics
- Univariate hypothesis tests
- Practical applications in SPSS

Initial competences

- Forknowledge is based on the endterms of the secondary school [mathematics]
- Passive use of English language
- General knowledge of the use of pc and internet

Final competences

- 1 Understand the importance and aim of Evidence Based Medicine
- 2 Reason the general principles of scientific research
- 3 Search scientific literature efficiently and reflect on the quality
- 4 Differentiate different study designs
- 5 Knowledge of the foundations of descriptive and inferential statistics
- 6 Being able to conduct and interpret basic and more advanced statistical analyses

7 Being able to use SPSS when conducting the statistical analyses and applications

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture, seminar: practical PC room classes

Extra information on the teaching methods

EBM: Guided selfstudy: through blended learning based on literature and learning path

Learning materials and price

- Statistische Gegevensverwerking met behulp van IBM SPSS Statistics, Coorevits P, Buysse H, Deschepper E. (+/- 20 euro)
- Health Literacy: from reference to review. Mira Meeus & Nick Gebruers. Acco 2016 (+/- 50 euro)

References

- Inleiding in Evidence Based Medicine: Klinisch handelen gebaseerd op bewijsmateriaal. Scholten et al. BSL 2014

Course content-related study coaching

Electronically via Ufora

Evaluation methods

end-of-term evaluation

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

Written examination, skills test

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

Written examination, skills test

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

not applicable

Calculation of the examination mark

The final mark is the weighted average of the partims Statistics (75%) and EBM (25%). When the student has a score of less than 9/20 for any of the 2 separate components, the student can no longer pass the course. When the final mark is a value of 10 or more on 20, the final score will be reduced to 9/20.