COURSE SYLLABUS
Scientific Methods and Statistics, 7.5 credits

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Course Code:	HSCG10	**Education Cycle:**	First-cycle level
Confirmed by:	Utbildningsrådet May 9, 2018	**Disciplinary domain:**	Medicine
Valid From:	Jan 20, 2020		
Version:	1	**Subject group:**	MT2
		Specialised in:	G1N
Reg number:	Department of Rehabilitation	**Main field of study:**	Prosthetics and Orthotics

Intended Learning Outcomes (ILO)

Upon completion of the course students should have the ability to:

Knowledge and understanding
- describe and discuss various quantitative research and analysis methods
- describe and discuss various qualitative research and analysis methods.

Skills and abilities
- critically evaluate research methods in relation to a well-defined aim
- determine and apply appropriate statistical tests for different types of empirical data
- determine and apply appropriate methods for analysis of qualitative data
- use statistical packages (e.g. SPSS and Excel) and apply common statistical tests.

Judgement and approach
- appreciate the importance of research ethics
- develop independent thinking for critically analysing research reports.

Contents

- research ethics
- qualitative data collection methods
- common methods for analysing qualitative data
- quantitative research design
- data management and descriptive statistics
- hypothesis testing (including tests between two or more groups)
- measurement error
- reliability and validity
- statistical power

Type of instruction

The course is conducted in the form of online instructional content, lectures and tutorials.

The teaching is conducted in English.

Prerequisites

General entry requirements.

Examination and grades

The course is graded A, B, C, D, E, FX or F.

The course examination will be based upon a two-part individual examination (one part is conducted using statistical analysis software).

A university lecturer will serve as examiner for this course.

Registration of examination:

Name of the Test	Value	Grading
Examination	7.5 credits	A/B/C/D/E/FX/F

Course literature

Field, A. (2013). *Discovering statistics using IBM SPSS statistics: and sex and drugs and rock 'n' roll.* Los Angeles: Sage.

The most recent editions of the course literature should be used.
Additional relevant journal articles will be used.