



## KURSPLAN

# Scientific Methods and Statistics, 7,5 högskolepoäng

*Scientific Methods and Statistics, 7.5 credits*

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<b>Kurskod:</b>	HSCG10	<b>Utbildningsnivå:</b>	Grundnivå
<b>Fastställd av:</b>	Utbildningsrådet 2018-05-09	<b>Utbildningsområde:</b>	Medicinska området
<b>Gäller fr.o.m.:</b>	2020-01-20	<b>Ämnesgrupp:</b>	MT2
<b>Version:</b>	1	<b>Fördjupning:</b>	G1N
<b>Diarienummer:</b>	Department of Rehabilitation	<b>Huvudområde:</b>	Ortopedteknik

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### Lärandemål

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

#### Kunskap och förståelse

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

#### Färdighet och förmåga

- 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.

#### Värderingsförmåga och förhållningssätt

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

### Innehåll

- 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

### Undervisningsformer

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

Undervisningen bedrivs på engelska.

**Förkunskapskrav**

General entry requirements.

**Examination och betyg**

Kursen bedöms med betygen A, B, C, D, E, FX eller 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.

Poängregistrering av examinationen för kursen sker enligt följande system:

Examinationsmoment	Omfattning	Betyg
Examination	7,5 hp	A/B/C/D/E/FX/F

**Kurslitteratur**