

# Kursplan

för kurs på forskarnivå

**Statistik 2**

**Statistical methods 2**

**7.5 Högskolepoäng**

**7.5 ECTS credits**

**Kurskod:**

PS3STA2

**Institution**

Psykologiska institutionen

## Förkunskapskrav och andra villkor för tillträde till kursen

The course assumes prior knowledge corresponding to the course Statistics 1 (Master course, main book: Howell, 2010, Statistical Methods for Psychology, ISBN-13: 978-0-495-59785-8)

## Lärandemål

Upon successfully completing the course, you will be able to:

- (1) ... understand the statistical theory behind common multivariate methods, including analysis of variance, multiple linear and logistic regression, structural equation modeling, factor analyses, cluster analysis and multidimensional scaling;
- (2) ... select statistical methods and conduct statistical analyses appropriate for summarizing multivariate data and generalizing from multivariate data to processes which have generated the data (inference).

## Innehåll

The course covers the following topics:

Analysis of variance

Linear and logistic regression

Component analysis and Exploratory factor analysis

Confirmatory factor analysis and Structural equation modeling

Cluster analysis

Multidimensional scaling

## Examinationsformer

One written examination (Learning outcome 1) and three computer exercises (Learning outcome 2). See curriculum.

## Arbetsform

The course consists of seminars and computer exercises. The seminars deal with statistical theory behind statistical methods, and the computer exercises give training in applied data analyses. To be able to contribute to the seminar discussions, you need to have read the literature assigned to each occasion (see schedule).