# **Linnæus University**



# Course syllabus

Faculty Board of Business, Economics and Design

School of Business and Economics

1ST900 Ekonomisk Statistik, 15 högskolepoäng 1ST900 Business Statistics, 15 credits

#### Main field of study

**Statistics** 

### **Subject Group**

**Statistics** 

#### Level of classification

First Level

#### **Progression**

G<sub>1</sub>N

#### **Date of Ratification**

Approved 2009-12-18

Revised 2011-12-09 by School of Business and Economics. Revised due to translation into English

The course syllabus is valid from autumn semester 2011

#### **Prerequisites**

General entry requirements and Mathematics C, Civics A. (field-specific entry requirements 4 with exception for English B)

### Objectives

MODULE 1 Business Statistics I, 7.5 credits

On completion of the course, students should be able to:

- Apply descriptive statistics, that is, compile and present different types of data material as well as calculate and interpret different summarised measures
- Carry out simpler probability calculations
- From selection, draw conclusions about the characteristics of populations
- Use a mini calculator as an aid for statistical calculations

MODULE 2 Business Statistics II, 7.5 credits

On completion of the course, students should be able to:

- Analyse and interpret the correlation between survey variable and one or more explanatory variables
- Perform elementary time series analyses and make quantitative predictions
- Understand ideas and principles with statistical inference
- · Carry out fundamental tests
- Use statistical software

#### Content

MODULE 1 Business Statistics I, 7.5 credits

- Descriptive statistics
- · Fundamental probability theory
- Selection methodology

MODULE 2 Business Statistics II, 7.5 credits

The course deals with the following areas:

- Regression analysis (single, multiple, non-linear regressions)
- Elementary time series analysis and quantitative prediction methods
- Statistical inference theory (confidence intervals and hypothesis exercises)

## Type of Instruction

Teaching is in the form of lectures, seminars and group assignments. Group assignments are made up of, with help of a statistics programme, compiling, analysing and presenting quantitative data material. Teaching and examinations are carried out via a web-based distance platform.

#### Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Students who do not achieve a satisfactory result in the examinations are permitted to make a second attempt approximately 5-8 weeks after the normal examination date. The student will have a minimum of five occasions for written exams in relation to the syllabus to which the student was accepted. Usually 3 occasions per academic year.

Results are graded using one of the terms Passed with distinction, Pass or Fail, and A-F according to the ECTS scale. A basis for grading is formed from how well the student has fulfilled the expected learning outcomes.

#### Course Evaluation

A written evaluation in conducted and complied in a report, which is filed at the department. The result and actions, if taken, are communicated to the teacher responsible for the course and presented to the students in the way most appropriate according to the teacher responsible for the course. Other types of evaluations, such as continuous during the course or oral communication with the students, can occur and is encouraged to secure continuous quality improvement.

# Required Reading and Additional Study Material

MODULE 1 Business Statistics I, 7,5 credits

Dahmström, Karin

Från datainsamling till rapport, Studentlitteratur, latest edition

School of Economics Compendia

MODULE 2 Business Statistics II, 7,5 credits

Andersson, G., Jorner, U. och Ågren, A. *Regressionsanalys och tidsserieanalys* Studentlitteratur, latest edition 293 p

Körner, S. och Wahlgren L. *Statistisk dataanalys*, latest edition. Studentlitteratur AB. 466 p.

Körner, S., (2000). *Tabeller och formler för statistiska beräkningar*, latest edition. Studentlitteratur AB. 60 p.

Further teaching aids Lecture compendiums, computer assignments and supervision