# **Linnæus University**

Dnr: LNU-2023/4430

## Course syllabus

School of Business and Economics

Department of Economics and Statistics

4NA920 Avancerad utvärdering av ekonomisk politik med stora data, 15 högskolepoäng

Advanced Economic Policy Analysis using Big Data, 15 credits

### Main field of study

**Economics** 

#### Subject

**Economics** 

#### Level

Second cycle

## **Progression**

A1N

#### **Date of Ratification**

Approved 2024-02-12.

The course syllabus is valid from autumn semester 2024.

#### **Prerequisites**

General entry requirements for studies at the first-cycle level and specific entry requirements:

Economics 15 credits and statistics or credits in time series and regression analysis, or the equivalent, 15 credits.

English 6, or the equivalent.

### **Objectives**

#### Module 1: Introduction to policy analysis using big data 7.5 credits

After completing this module the student should be able to:

• apply economic and statistical tools to interpret results from studies that use big data to evaluate economic policies

- assess and motivate the method of choice and show understanding regarding consequences
- identify, restrict and formulate a problem using scientific relevance
- · critically reflect upon empirical methods used to evaluate economic policies

## Module 2: Introduction to management of big data for policy analysis 7.5 credits After completing this module the student should be able to:

- assess important aspects of data collection and the organising of data relevant to evaluating economic policies
- assess and motivate their choice of method and demonstrate an understanding of its consequences

#### Content

#### Module 1: Introduction to policy analysis using big data 7.5 credits

The module contains:

- · empirical methods for evaluating economic policies
- theory on market failure and market intervention
- · analysis of economic policies using big data
- application of economic analysis of economic policies in different areas such as health, education, crime, and family policy

## Module 2: Introduction to management of big data for policy analysis 7.5 credits The module contains:

- data collection with experiments and questionaires
- · measurement errors
- · organisation and preparation of econometric analysis of big data
- use of software to analyse big data

## Type of Instruction

Teaching is carried out as distance learning via a learning platform and consists of self-studies based on instructions from the course coordinator. The teaching consists of lectures, seminars, exercises and an oral presentation. The oral presentation is a compulsory component. Dates for compulsory components are stated in the schedule. The course requires access to a computer with internet connection and a webcam.

### Examination

The course is assessed with the grades A, B, C, D, E or F.

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#### Module 1: Introduction to policy analysis using big data 7.5 credits

The module is examined through an individual written hand-in assignment 7.5 credits.

## Module 2: Introduction to management of big data for policy analysis 7.5 credits. The module is examined through individual written hand-in assignments 7.5 credits.

#### The following applies to all modules:

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail.

The grade of the course is a combined assessment from the grades of the various course modules. The combined assessment is based on the grades and the scope of the course (15 credits). The more extensive a module is, the greater impact it will have on the final grade. Module grades with the grading scale between G-U will not be considered into the combined assessment. However, a G is required for each of the modules in order to receive a final course grade.

Resit examination is offered in accordance with Linnaeus University's Local regulations for courses and examination at the first- and second-cycle levels.

In the event that a student with a disability is entitled to special study support, the examiner will decide on adapted or alternative examination arrangements.

#### Course Evaluation

A course evaluation should be conducted during the course or in connection with its conclusion. The results and analysis of the completed course evaluation should be promptly communicated to students who have completed the course. Students participating in the next course instance should be informed of the results of the previous course evaluation and any improvements that have been made, no later than at the start of the course.

### Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: 4NA900 with 15 credits.

Required Reading and Additional Study Material
The following applies to all modules:
Additional study material
Scientific articles applied in evaluating accomplished.

Scientific articles specified in evaluating economic policies.