APPLIES TO ACADEMIC YEAR 2013/2014

MET 1333 Econometrics

Programme
Bachelor of Science in Business (3. year)

Responsible for the course
Jon H. Fiva

Department
Department of Economics

Term
According to study plan

ECTS Credits
7,5

Language of instruction
Norwegian

Introduction

This course offers an introduction to econometrics. Econometrics uses statistical methods to quantify economic relationships. These methods are used both in business and economics, as well as in other social sciences.

Learning outcome

Acquired knowledge
After having completed this course you should be able to explain how regression analysis is used to quantify economic relationships. You should be able to explain under what circumstances empirical analysis may be given a causal interpretation. You should be able to interpret empirical analysis critically.

Acquired skills
You should acquire the relevant skills to be able to use regression analysis to quantify causal relationships. You should be able to discuss different modelling strategies useful for prediction and policy analysis. In addition to linear regression methods, you should also understand non-linear regression functions (such as log specifications), regression with panel data (combined cross sectional and time series data), non-linear probability methods (probit and logit), and methods for isolation variation in explanatory variables that are independent from the error term.

Reflection
The course provides you with critical thinking skills relevant for discussing assumptions that least square techniques build on. You

should be able to use models and methods relevant for the data you have available and be able to discuss critically whether the assumptions imposed hold in practice.

Prerequisites
MET 1180 Mathematics, MET 1190 Statistcs or equivalent.

Compulsory reading
Books:
Stock, James H., Mark W. Watson. 2012. Introduction to econometrics. 3rd ed. Pearson. kapittel 1, 4 - 13.
Vedleggene er ikke pensum

Recommended reading
Books:
Midtbø, Tor. 2012. Stata : en entusiastisk innføring. Universitetsforlaget

Course outline
1. Simple linear regression
2. Multiple linear regression
3. Non-linear regression functions
4. Internal and external validity
5. Regressions using panel data
6. Probit and logit regressions
7. Regressions with instrumental variables
8. Experiments and quasi-experiments

Computer-based tools
STATA

Learning process and workload

The course consists of 36 hours of lectures and 6 hours of problem-solving.

Coursework requirements
During the course seven (7) assignments will be set through It's Learning. Students need to pass five (5) of these to be able to sit for the exam. Feedback on the assignments will be provided electronically and in class. More information, concerning deadlines etc. will be provided at the beginning of the semester.

Recommended use of time

Activity	**Hours**
Lectures	36
Assignment-solving in classroom	6
Reading literature and preparation for lectures	100
Assignment-solving	53
Examination	5
Total recommended use of hours	**200**

Use of hours

Coursework requirements
At the beginning of the semester, 7 coursework requirements will be given. At least 5 of these must be approved before the students can take the examination at the end of the course.

Examination
A five-hours individually written examination concludes the course.

Examination code(s)
MET 13331 - Written examination, counts 100% towards the final grade in MET 1333 Econometrics, 7.5 ects.

Examination support materials
BI-defined exam calculatoris allowded at the written exam. TEXAS INSTRUMENTS BA II Plus™
For more information, please visit our web-based Student Handbook at http://bi.edu/studenthandbook/examaids

Re-sit examination
A re-sit examination is every term.
Students that have not had their coursework requirements approved will not be able to take the examination. This means that they have to re-take the whole course, and not only the examination.

Additional information