



## COURSE SYLLABUS

# Advanced Econometric Analysis, 7.5 credits

*Advanced Econometric Analysis, 7,5 högskolepoäng*

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<b>Course Code:</b>	JAAR26	<b>Education Cycle:</b>	Second-cycle level
<b>Confirmed by:</b>	Council for Undergraduate and Masters Education Dec 21, 2015	<b>Disciplinary domain:</b>	Technology
<b>Valid From:</b>	Aug 22, 2016	<b>Subject group:</b>	ST1
<b>Version:</b>	1	<b>Specialised in:</b>	A1N
<b>Reg number:</b>	IHH2016/01163	<b>Main field of study:</b>	Statistics

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### Intended Learning Outcomes (ILO)

On completion of the course the students will be able to:

Knowledge and understanding

1. Assess the usefulness/weaknesses of the statistical methods.
2. Recognize the common errors made in econometric analysis
3. Conduct panel data analysis

Skills and abilities

4. Assign an appropriate model to economic data
5. Assess the goodness-of-fit of a model
6. Calculate relevant point estimates
7. Conduct diagnostic tests
8. Applying robust methods
9. Use statistical software appropriate for econometric analysis

Judgement and approach

10. Assess the characteristics of typical economic data
11. Determine when to use which method
12. Recognize the common problems associated with econometric modelling

### Contents

- Panel data analysis
- Pooled regression models
- Fixed-effects models
- Random-effects models
- Inference
- Non-linear regression models
- Modelling strategies
- Diagnostic testing
- Computer labs

**Type of instruction**

Lectures, seminars and computer labs.

The teaching is conducted in English.

**Prerequisites**

Bachelor's Degree in Business or Economics (i.e the equivalent of 180 credits at an accredited university) including 15 credits in Statistics/ Econometrics of which 7.5 credits must be at the master level (or the equivalent) (or the equivalent).

**Examination and grades**

The course is graded A, B, C, D, E, FX or F.

The examination consists of two parts:

A number of assignments to be submitted within fair but sharp deadlines. Some assignments are mandatory with the grade pass or fail, while another assignment is worth 50 % (3.75 credits) of the final grade.

All assignments are individual work.

A written exam, worth 50% (3.75 credits) of the final grade.

The ILOs 1-12 will be examined through the written assignments.

The ILOs 4-8 will be examined through the written exam.

Registration of examination:

Name of the Test	Value	Grading
Written examination	7.5 credits	A/B/C/D/E/FX/F

**Course evaluation**

It is the responsibility of the examiner to ensure that each course is evaluated. At the outset of the course, evaluators must be identified (elected) among the students. The course evaluation is carried out continuously as well as at the end of the course. On the completion of the course the course evaluators and course examiner discuss the course evaluation and possible improvements. A summary report is created and archived. The reports are followed up by program directors and discussed in program groups and with relevant others (depending on issue e.g. Associate Dean of Education, Associate Dean of faculty, Director of PhD Candidates, Dean and Director of Studies). The next time the course runs, students should be informed of any measures taken to improve the course based on the previous course evaluation.

**Other information**

Academic integrity

JIBS students are expected to maintain a strong academic integrity. This implies to behave within the boundaries of academic rules and expectations relating to all types of teaching and examination.

Copying someone else's work is a particularly serious offence and can lead to disciplinary action. When you copy someone else's work, you are plagiarizing. You must not copy sections of work (such as paragraphs, diagrams, tables and words) from any other person, including another student or any other author. Cutting and pasting is a clear example of plagiarism. There is a workshop and online resources to assist you in not plagiarizing called the Interactive Anti-Plagiarism Guide.

Other forms of breaking academic integrity include (but are not limited to) adding your name to a project you did not work on (or allowing someone to add their name), cheating on an examination, helping other students to cheat and submitting other students work as your own, and using non-allowed electronic equipment during an examination. All of these make you liable to disciplinary action.

### **Course literature**

#### Compulsory literature

Verbeek, Marno, A guide to modern econometrics, 4th ed, ISBN 1119951674.

Other material will be provided by the teachers.