COURSE SYLLABUS

Advanced Econometric Analysis, 7.5 credits

Advanced Econometric Analysis, 7,5 högskolepoäng

Course Code:	JAAR21	**Education Cycle:**	Second-cycle level
Confirmed by:	Council for Undergraduate and Masters Education Oct 19, 2020	**Disciplinary domain:**	Technology
Revised by:	Jan 13, 2021	**Subject group:**	NA1
Valid From:	Jan 18, 2021	**Specialised in:**	A1N
Version:	2	**Main field of study:**	Economics

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. Apply 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

Connection to Research and Practice

This course prepares the students for applied research in economics. This knowledge may be used in the thesis writing, governmental reports and economic policy evaluation. The purpose is also to provide ability to make advanced econometrical analysis and based on statistical assessment draw conclusions about unknown economic characteristics in the society. The econometrical tools and methods taught in this course are in line with the research conducted at JIBS and the research centers for example CEnSE.

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 (or the equivalent)

Examination and grades

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

The examination consists of two parts:
The ILOs 1-8 will be examined through the individual written exam, representing 4.5 credits.
The ILOs 1-12 will be examined through the individual written assignment, representing 3 credits.

Registration of examination:

Name of the Test	Value	Grading
Individual written exam[I]	4.5 credits	A/B/C/D/E/FX/F
Individual written assignment[I]	3 credits	U/G

[I] All parts of compulsory examination in the course must be passed with a passing grade (A-E or G) before a final grade can be set. Grade is set in accordance with JIBS grading policy.

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
Marno Verbeek, A Guide to Modern Econometrics, Latest edition

Other material will be provided by the teachers.