



## COURSE SYLLABUS

# Analytical Methods for Economic and Financial Analysis, 7.5 credits

*Analytical Methods for Economic and Financial Analysis, 7,5 högskolepoäng*

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Course Code:	FSSS23	Education Cycle:	Second-cycle level
Confirmed by:	Council for Undergraduate and Masters Education Jan 4, 2013	Disciplinary domain:	Technology
Revised by:	Council for Undergraduate and Masters Education Oct 22, 2014	Subject group:	ST1
Valid From:	Jan 19, 2015	Specialised in:	A1F
Version:	2	Main field of study:	Statistics
Reg number:	IHH 2014/4334-122		

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## Intended Learning Outcomes (ILO)

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

### *Knowledge and understanding*

- discuss what problems arise with various model misspecifications.
- demonstrate understanding of matrix algebra representations for statistical models.
- Interpret results from various advanced statistical techniques used in economics and finance, including those appropriate for analyzing panel data models, qualitative response models, and various time series models.

### *Skills and abilities*

- determine when a model is misspecified and be able to make the appropriate adjustments.
- Select the most proper model and estimation method for an empirical study under consideration.

### *Judgement and approach*

- present results in a way that avoids possible bias arising from the researcher.

## Contents

Advanced statistical techniques are covered in this course, especially those relevant for financial analysis and for microeconomic and trade analysis. The content of the course includes panel data regression models, and qualitative response models, and various time series methodologies.

## Type of instruction

Teaching is done through a combination of lectures and hands-on lab sessions. A large part of the course consists of computer labs using an econometric software package. An important element of the course is to prepare the student for writing master theses in Economics, Financial Economics, or Statistics.

The teaching is conducted in English.

## Prerequisites

Bachelor's Degree in Business or Economics equal to 180 credits including Business Statistics 2, 7.5 credits or Econometrics 1, 7.5 credits; and Mathematical Methods for Economic and Financial Analysis, 7.5 credits (or the equivalent).

### Examination and grades

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

The ILOs within knowledge and understanding will be examined through a written exam and written assignments while the ILO's within Skills and abilities and Judgment and approach will be examined through written assignments.

Registration of examination:

Name of the Test	Value	Grading
Examination <sup>1</sup>	6 credits	A/B/C/D/E/FX/F
Assignments	1.5 credits	U/G

<sup>1</sup> Determines the final grade of the course, which is issued only when all course units have been passed.

### 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**

### *Literature*

Compulsory literature

Gujarati, Damodar N and Porter, Dawn C (2009) Basic Econometrics 5th edition, McGraw-Hill Book Company [ISBN: 978-007-127625-2], or later edition.