## COURSE SYLLABUS Applied Economics for Decision Making, 30 credits

Applied Economics for Decision Making, 30 högskolepoäng

Course Code: Confirmed by:	JEDR21 Council for Undergraduate and Masters Education Jun 7, 2021	Education Cycle: Disciplinary domain:	Second-cycle level Social sciences (75%) and natural sciences (25%)
Revised by:	Examiner Oct 29, 2021	Subject group:	NA1
Valid From:	Jan 17, 2022	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. relate knowledge and understanding of economics to real world applications;

2. demonstrate specialized knowledge about methods used for economic analyses;

Skills and abilities

3. identify and formulate economic problems critically and independently;

4. apply economic models and use them to analyse and assess complex economic phenomena and real world applications;

5. identify and apply appropriate empirical methods for economic problems.

6. demonstrate the ability to process various kinds of data for economic analyses.

7. clearly report and discuss his/her conclusions as well as the knowledge and arguments they are based on in speech and writing.

Judgement and approach

8. analyze how economic models can be used to assess economic problems.

9. evaluate the possibilities and limitations of various empirical methods.

10. Independently interpret and critically review results the empirical analyses.

11. Critically and independently reflect upon and evaluate his/her own work.

## Contents

This course is designed to provide students with the tools and knowledge in how to solve economic problems that the student might encounter later in his/her career. The course combines a variety of theories and perspectives to enable students to develop theoretical and practical knowledge about different economic fields, as well as an understanding of which methods to use in order to solve problems an provide material for decision making within these fields. As such, the knowledge gained by students in the course will help them to assess which information is needed, how to produce such information, and how to analyse it in order to make a decision regarding an economic problem. The course consists of 5 modules of 6 credits each. The individual modules are explained below:

## Module 1: Evaluation methods

The objective of this module is to offer the students a toolbox for the upcoming modules, covering cost-benefit analysis (CBA) and statistical methods relevant for economic evaluation using quantitative data. An introduction to CBA is given, both of its theoretical basis as well as the typical steps to follow when performing a CBA. Also, contemporary issues of CBA are covered such as discounting, benefit transfer and optimism bias. The econometrical part fundamentally concerns quantifying and interpreting economical relationships using statistical techniques. The student will here be introduced to different statistical models such as (but not restricted to) models based on limited dependent variables and models based on panel data. The knowledge of this module is not only useful for the next coming modules, but also relevant for analyzing policy evaluations and governmental reports, as well for the upcoming thesis writing.

## Module 2: Geographical economics

The objective of this module is to give students knowledge about the location aspects of economic phenomena, based on various forms of scale economies, externalities, and transport costs. The course will provide the student with a capacity to critically analyze economic problems relating to location, specialization, and trade between regions/countries. It will give students an understanding of the sources of the geographic concentration of economic activity. It will deal with the questions regarding the trade-off between economic efficiency and geographic inequalities and related policy choices. The content of the module is tightly linked to research in the field of geographical economics and New Economic Geography (NEG).

#### Module 3: Entrepreneurship

This module focuses on the role of entrepreneurs and entrepreneurship. The role of entrepreneurs for economic growth and development is well-documented both at the national and regional levels. Entrepreneurs contribute to productivity growth, innovations, employment growth, and increased level of competitiveness where some of the positive effects on employment and wages stretch beyond the entrepreneur themselves and into the wider local economy. However, entrepreneurship is a heterogeneous phenomenon in which for example innovative entrepreneurs are mixed with more typical entrepreneurs in the forms of passive followers, over-optimistic gamblers, and individuals endeavoring to find an alternative to unemployment. This module will provide students with knowledge about entrepreneurship, focusing both at the individual level of the entrepreneur and the wider consequences for the economy.

#### Module 4: Public and health economics

This module concerns the associations between health, education, labor market and marital outcomes over the life course, and the interplay between individuals and institutions from this respect. The considered processes are studied from both theoretical and empirical perspectives with emphasis on the variation in health and its determinants. A main focus is set on the empirical establishment of causal relationships between the studied entities.

#### Module 5: Environmental economics

The faster deterioration of environment and necessity to rely on the green and circular economic policies as an effective environmental management tool has stimulated considerable research and debate among stakeholders. This module covers an overview of the green and circular economics. It contains a number of integrated parts related to energy, environment, resource economics and economic growth. Part I introduces the students to the recent development in green economics as a concept, its theoretical foundation, political economy, development strategy and sustainable development. Part II covers the circular economy, networks, organizations, policies, infrastructure and measurable expected effects. Part III is related to the empirical research in the area in respect with theory, data, method and estimation result and findings. The final Part IV covers future development with focus on directions, policy, organizations, capacity, areas and interventions.

#### **Connection to Research and Practice**

Parts of this course are directly related to the focus areas at Jönköping International Business School (JIBS): entrepreneurship and renewal. Parts of the course are also tightly connected to the Center of Entrepreneurship and Spatial Economics (CEnSE) at JIBS, which focus on entrepreneurship and regional development/growth.

Throughout the course connections will be made to real-word applications to enhance the students learning and ability to make use of the taught skills in their later careers. The students will also appreciate how these skills can be used in policymaking to influence the development of society, and how theory and empirical work can be used to guide policy.

## Type of instruction

The course includes lectures, workshops, seminars, and group work. The course runs as full speed.

The teaching is conducted in English.

## Prerequisites

The applicants must hold the minimum of a bachelors's degree in Economics equal to 180 credits including 15 credits in Mathematics/Statistics/Econometrics

## Examination and grades

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

## Module 1

Individual written exam (ILO 2, 6, 8, 9, 10), representing 3 credits. Individual assignment (ILO 2, 4, 8, 10), representing 1.5 credits. Group assignment (ILO 2, 4, 6, 8, 10), representing 1.5 credits.

## Module 2

Individual assignment 1 (ILO 1, 2, 8), representing 2 credits. Individual assignment 2 (ILO 3, 4, 5, 6, 7, 10, 11), representing 2 credits. Individual assignment 3 (ILO 3, 4, 5, 6, 7, 10, 11), representing 2 credits.

#### Module 3

Individual assignment (ILO 1, 2, 3, 4, 5, 6, 7, 11), representing 3 credits. Group assignment (ILO 1, 3, 7, 11), representing 2 credits. Presentation (ILO 7), representing 1 credit.

#### Module 4

Individual assignments (ILO1, 3, 4, 5, 7, 8, 11), representing 5 credits. Presentation (ILO 2, 7, 11), representing 1 credit.

#### Module 5

Individual written exam (ILO 1, 2, 3), representing 3 credits. Group assignment (ILO 4, 5, 6, 7, 8), representing 3 credits.

#### Registration of examination:

Name of the Test	Value	Grading
Module 1: Individual written exam <sup>I</sup>	3 credits	A/B/C/D/E/FX/F
Module 1: Individual assignment <sup>I</sup>	1.5 credits	A/B/C/D/E/FX/F
Module 1: Group assignment <sup>I</sup>	1.5 credits	U/G
Module 2: Individual assignment 1 <sup>I</sup>	2 credits	A/B/C/D/E/FX/F
Module 2: Individual assignment 2 <sup>I</sup>	2 credits	A/B/C/D/E/FX/F
Module 2: Individual assignment 3 <sup>I</sup>	2 credits	A/B/C/D/E/FX/F
Module 3: Individual assignment <sup>I</sup>	3 credits	A/B/C/D/E/FX/F
Module 3: Group assignment <sup>1</sup>	2 credits	U/G
Module 3: Presentation <sup>1</sup>	1 credit	A/B/C/D/E/FX/F
Module 4: Individual assignments <sup>1</sup>	5 credits	A/B/C/D/E/FX/F
Module 4: Presentation <sup>I</sup>	1 credit	A/B/C/D/E/FX/F
Module 5: Individual written exam <sup>I</sup>	3 credits	A/B/C/D/E/FX/F
Module 5: Group assignment <sup>1</sup>	3 credits	A/B/C/D/E/FX/F

<sup>I</sup> All parts of compulsory examination in the course must be passed with a passing grade (A-E) before a final grade can be set. The final grade of the course is determined by the sum total of points for all parts of examination in the course (0-100 points). Grade is set in accordance to JIBS grading policy.

## **Course evaluation**

It is the responsibility of the examiner to ensure that each course is evaluated. There must be course evaluators identified among the students. The evaluation is carried out continuously as well as at the end of the course, through a survey. After the course the course Examiner meets with student evaluators to discuss the survey results and possible improvements. A summary report is also created. The report is followed up by program directors and discussed with faculty and relevant others (e.g. Associate Dean of Education, Associate Dean of faculty, Director of PhD Candidates, Dean, or 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

Verbeek, M. (2017). A guide to modern econometrics (5th edition.). John Wiley & Sons, Inc.

A list of articles will be supplied at the course introduction.