Amsterdam School of Economics
Faculty of Economics and Business

Introduction to Econometrics
Course outline

[2018-2019, first semester, third period)

Code course: 6011P0170Y
Number of credits: 6 ects (- 168 hours)
Co-ordinator: Andrei Sirchenko (room E6.30, phone 0205254244, e-mail a.sirchenko@uva.nl)
Lecturers and tutors: Rob van Hemert (skills tutorials), Merel Rijvordt (skills tutorials), Andrei Sirchenko (lectures and computer classes) and Rutger Poldermans (computer classes).

1   General remarks

The course Introduction Econometrics in intended to give students a first idea about what econometrics actually entails (econometrics part) and to improve the writing skills (skills part). Of course, the econometrics and the skills part are related: you have to write a research report using econometric research techniques. This report determines part of the grade you earn for this course (see below).
The classes are scheduled in three weeks. In the fourth week the examination will take place. For the econometrics part there are five hours of lectures and two hours of computer class every week. On top of that you have 4 hours of tutorials for the skills part every week.

1.1   Aim and content

Aim The econometrics part in intended to give you an introduction into econometrics and applied economic research in general. You will learn to apply some basis statistical and econometrical techniques to analyze economic data. You will also learn to report in writing in an academic manner.

Content If gasoline gets more expensive we expect that more people will go to work by train. If the mortgage rent decreases we expect a larger demand for houses. These economic relations look quite obvious, but do they really exist and to what extent? Econometricians try to quantify the relation between economic variables and at the same time investigate whether there is indeed a relation. To do this advanced statistical and econometrical methods are applied to economic data. In this course we give a first introduction into econometrics and you will learn to apply it to a simple case. Econometrics is therefore very related to applied academic research. Being able to report correctly is very important for econometricians. You will learn to do this during this course.

1.2   Determination final grade:

The final grade of the course Introduction Econometrics is determined as follows (weights of every element between parentheses):

- Examination econometrics part (60%): examination duration 2 hours, grade earned rounded off at 1 digit

- Research report (40%) : see the skills course outline for more information: grade earned will be rounded off at 1 digit

For both pars a sufficient score (i.e. 5.5 or higher) needs to be earned. The final grade is rounded to natural numbers or half points, except that a result between 5.5 (inclusive) and 5.75 is rounded off to 6 and a result between 5.25 and 5.5 (exclusive) is rounded of to 5. Students who did not participate in both parts or earned a sufficient grade for one or both parts will be awarded a final grade of either (1) rounded off grade, if the weighted average is < 5.5 or (2) 5, if the weighted average is ≥ 5. For both elements of the examination a sufficient grade needs to be earned! The results you earned in this course will remain valid until September 1st, 2018.

1.3 Requirements

Presence is mandatory during the tutorials/skills classes (see the course outline of the skills part).

1.4 Course load

The course load of Introduction Econometrics is 6 ects or 168 hours of study (including taking classes, preparation, examination). Be aware this is more than 40 hours a week!

2 Econometrics part

This part provides an introduction to econometrics. During three weeks you attend lectures and computer classes to learn some basic concepts and techniques of econometrics. This will be tested in the examination. Apart from that do will actually do research using econometrics. Quite often you will have to write a research report on your empirical investigation. How to do this correctly will be discussed in the skill classes.

2.1 Lecturers

- Lectures: Andrei Sirchenko (room E6.30, phone 0205254244, e-mail a.sirchenko@uva.nl).

- Computer classes: Andrei Sirchenko and Rutger Poldermans (email R.W.Poldermans@uva.nl).

2.2 Organization and content

Every week you attend five hours of lectures in which some topics from the reader and some exercises are discussed according to the schedule below. You are expected to have tried them at home beforehand. Only a limited number of exercises can be discussed. Now and then you will work on an exercise during the lecture. In computer class you learn to apply the econometric techniques in practice. In the first two weeks you will also learn to work with the econometric software EViews.

N.B. We advise you to prepare the lectures and computer classes in advance by reading the relevant theory before you go to class. Also, make the exercises at home first. Only then you will discover whether you can actually do the exercises and whether you understand the theory. Brief solutions to all the exercises will be provided on Canvas.

The classes will take place in a period of three weeks. In the fourth week two hours of questions and answers (on Monday) and two hours of the examination (on Wednesday) are scheduled.

Day	January	Time	Type	Room
Mo	14 + 21	9:00-11:00	lecture	C1.04
Tu	8 + 15 + 22	9:00-11:00	lecture	C1.04
Fr	11 + 18	14:00-15:00	lecture	C1.04
Fr	25	13:00-15:00	lecture	C1.04
Mo	28	9:00-11:00	Question & Answers	C1.04
We	9 + 16 + 23	9:00-11:00	computer class group 2	JK3.02
We	9 + 16 + 23	13:00-15:00	computer class group 4	H3.01
We	9 + 16 + 23	9:00-11:00	computer class group 3	H2.01
We	9 + 16 + 23	11:00-13:00	computer class group 1	H2.01

The content of the classes in given in the table below.

Class	Content	Preparation
Tu - Week 1 - lecture	Introduction + Data analyses	Read Ch1+Ch+Ch3, do exercises
Fr - Week 1 - lecture	Introduction + Data analyses	Read Ch1+Ch+Ch3, do exercises
Week 1 - computer class	Data analyses	Read EViews Manual
Mo - Week 2 - lecture	Introduction to regression	Read reader Ch4, do exercises
Tu - Week 2 - lecture	Regression in practice	Read reader Ch5, do exercises
Fr - Week 2 - lecture	Regression in practice	Read reader Ch5, do exercises
Week 2 - computer class	Regression	
Mo - Week 3 - lecture	Econometrics + Paper: Stork	Read reader Ch6 and paper
Tu - Week 3 - lecture	Paper: Elite + Self	Read papers
Week 3 - computer class	Research report	Do your project
Fr - Week 3 - lecture	Discussion of last year exam	Do last year exam (see Canvas)
Mo - Week 4	Question and Answers	

2.3   Required reading

- "Reader Introduction Econometrics", available on Canvas.

- [Elite: Goldin, C. & Katz, L.F. (2008). Transitions: career and family life cycles of the educational elite. The American Economic Review, 98 (2), 363-369;

- [Stork: Hofer, T., Przyrembel, H., & Verleger, S. (2004). New evidence for the Theory of the Stork. Paediatric and Perinatal Epidemiology, 18, 88-92;

- [Self: Joona, P. A., & Wadensjo, E. (2013). The best and the brightest or the least successful? Self-employment entry among male wage-earners in Sweden. Small Business Economics, 40 (1), 155-172.

N.B. The papers can be downloaded from the digital library of the University of Amsterdam: http://lib.uva.nl/prim Choose: Find e-journals (rechtsboven) and enter the name of the journal.

2.4   Evaluation

The evaluation of the econometrics is part is done by an examination. The result of the examination determines the final grade of the course for 60%. The examination grade needs to be 5.5 or higher to pass the course.

- 1st opportunity to do exam: Wednesday January 30th 2019, 9:00u-11:00u, USC-Hall 2, Science Park.
- 2nd opportunity to do exam: Friday March 22nd, 2019, 9:00h-11:00h, IWO 4.04B (Geel), IWO 4.04C (Blauw) Rechts

3 Skills part

The two parts of the course contribute to one assignment: the writing of a research report. This report will be graded on both academic writing and applying your knowledge about quantitative data analysis. The research will be done in pairs and the grade will determine 40% of the final grade.

3.1 Lecturers

- Coordinator of the skills part and lecturer: Rob van Hemert (email r.vanhemert@uva.nl, room number M2.14, phone 0205254068).

- Lecturer: Merel Rijvordt, email M.L.S.Rijvordt@uva.nl.