

## Development Economics I (31E15000)

Teacher: Dr. Miri Stryjan

Period 1: 5.9 – 13.10

Course component	Time	Classroom
<b>Lectures:</b>	Mondays 13.15-15.00 Thursdays 10.15-12.00	R001U149 = Undergraduate center, U6 KONECRANES
<b>Exercise sessions:</b>	Friday 16.9 and Friday 30.9	R001U149 = Undergraduate center, U6 KONECRANES
<b>Exam</b>	Fri 21.10 09:00-12:00	R001U142
<b>Retake exam</b> NOTE: Separate registration needed!	Wed 14.12 09:00-12:00	R001U142

### Course structure:

The course consists in 12 lectures, and 2 exercise sessions.

**Lectures:** Eight lectures will be given by Dr Miri Stryjan, the responsible teacher for the course. The remaining four lectures are guest lecturers from United Nations University World Institute for Development Economics Research (UNU-WIDER) and University of Helsinki.

**The two exercise sessions** are adapted to the content of this course: one focused on understanding empirical methods (for homework 1), one focusing on reading and critically evaluating academic papers (for homework 2). Teaching Assistant: Jerry Montonen.

### Part 1: Introduction to the “big questions” of development economics and economic development.

#### Why does poverty exist and persist and what can explain the differences in growth and prosperity between countries?

In this part of the course, we will discuss theories of economic growth, as well as some of the newer theory areas in the literature that seek to explain why some countries are poorer than others: geography and institutions. In parallel with this, we will go over empirical tools such as regression analysis and methods related to causal estimation, primarily instrumental variable approaches and difference-in-differences.

#### WEEK 1 (Mon 5.9, Thu 8.9)

##### **Mon 5.9: Brief introduction to modern Development Economics & Growth models recap**

The first part of the lecture consists in an introduction of the course, with an overview of the topics we will cover. I also offer a brief introduction to development economics.

In the second part of the lecture, we approach the question of “why some countries are poor and others rich” by revisiting the workhorse models for explaining economic growth, and how they can be connected to data on technological and human capital investments. We also discuss *development accounting*.

**Concepts:** Economic growth, neoclassical growth model, endogenous growth, growth accounting, development accounting.

### **Thu 8.9: Misallocation and the fundamental factors of development**

In the first part of the lecture, we discuss the TFP term in the aggregate production function we saw in lecture 1 and review recent research on misallocation as an explanation for cross country differences in growth.

In the second part of the Lecture, we discuss the “big theories”, that seek to explain such differences between countries, and some empirical challenges for testing those theories.

**Concepts:** Misallocation, productivity, proximal vs fundamental/deep causes of development, historical explanations, the role of geography for economic development.

*WEEK 2 (Mon 12.9, Thu 15.9)*

**Homework 1 handed out on Monday 12.9.**

**Monday 12.9: Violence and conflict** *Guest lecture with Patricia Justino from UNU-WIDER.*

There are several links between economic development and conflict. For instance, all the countries unable to reach the Millennium Development Goals by 2015 had one common characteristic: they had recently experienced armed conflict and violence. In this lecture we will discuss research on how conflict and poverty are interrelated, with an emphasis on new research in economics.

**Concepts:** Human capital investments, behavioural and economics effects of war and victimization, the role of institutions.

**Methods:** household surveys, ex-combatant surveys, diff-in-diff, behavioural experiments, mixed methods.

**Thu 15.9: The Institutional approach to development 1:** Introduction to formal and informal institutions and their role for economic development and prosperity. Theoretical background, connecting to econ theory, how institutions (both formal and informal) address transaction costs and increase efficiency. Some examples of research that looks at informal institutions (e.g. Trust, norms).

**Concepts:** Transaction costs, information problems, Commitment problems, Trust, Norms.

**Friday 16.9: EXERCISE 1: 10-12.**

*Instructions for homework 1. Teaching Assistant: Jerry Montonen.*

*WEEK 3 (Monday 19.9, Thursday 22.9)*

**Mon 19.9: The Institutional approach to development 2** *Guest lecture with Matti Mitrunen, University of Helsinki.*

This lecture continues on institutions and, more broadly, on political economy reasons behind underdevelopment. We will go through empirical examples where political power has mattered for economic development.

**Concepts:** Formal institutions, growth, GDP per capita, property rights, deep determinants of development.

**Empirical methods:** Diff-in-diff, regression discontinuity

**Thu 22.9 : Poverty measures and concepts** *Guest lecture with Carlos Gradín from UNU-WIDER*

We will go over the main approaches to measuring poverty in developing countries, understanding the motivations behind this some of the main conceptual and practical challenges involved in this.

**Concepts:** monetary and multi-dimensional poverty, poverty lines and poverty indices.

**Deadline to Submit homework 1 on Friday 23.9**

## Part 2: The Microeconomics of Development.

**A closer look at some important aspects of life for poor individuals/households/firm owners in low-income countries of relevance to economics.** In this part of the course we will also discuss, in parallel with the "topic areas" outlined below, empirical tools and methods related to causal estimation such as randomized field experiments, difference in differences and instrumental variable strategies. This will be done using examples from the well-known and/or recent econ papers. We will also revisit micro-theoretical models, primarily utility maximization problems and production functions.

*WEEK 4 (Mon 26.9, Thu 29.9)*

**Homework 2 handed out Monday 26.9**

**Mon 26.9: Livelihoods of the Poor: Labor markets in low-income countries, Private sector, Small firms and Self Employment.** how do the poor in low-income countries make their living, and what characterizes non rural labor markets in these countries? We will go through recent research on self-employment and constraints to business growth.

**Concepts:** Business growth, Investments, Information.

**Empirical methods:** Randomized controlled trials (RCTs), Instrumental Variables (IV).

**Thu 29.9: Credit for the poor, microfinance.** In this lecture we will focus on a specific "enabler" of business investment and growth: credit. We will discuss the characteristics of credit markets and products for the poor and discuss recent *impact evaluations* of access to microcredit.

**Concepts:** Production function, Information, moral hazard and adverse selection, trust.

**Empirical methods:** Randomized controlled trials (RCTs), Impact evaluation.

**Friday 30.9: EXERCISE 2, 10-12 Feedback on homework 1. Paper reading and critically evaluating (instructions for Homework 2) Teaching Assistant: Jerry Montonen**

*WEEK 5 (Mon 3.10, Thu 6.10)*

**Mon 3.10: Health in low-income countries:** Health investment decisions of the household. reasons for under-investment in preventive health.

**Concepts:** Household utility function, Information, Time preferences, Externalities, Opportunity costs, Cost – benefit calculations, Trade-offs, Human Capital investments.

**Empirical methods:** Regression control and heterogenous effects, Randomized controlled trials (RCTs).

### **Thu 6.10: Agriculture** – Guest lecture with Kalle Hirvonen from IFPRI and WIDER

Agriculture lies at the heart of development. Three-quarters of the world's poor reside in rural areas, most obtaining their livelihood from agriculture. We will cover stylized facts about the role of agriculture in development and discuss the impact of Green Revolution – one of the most important economic events of the 20<sup>th</sup> century – on agricultural sector, economic growth, and development in low- and middle-income countries.

**Concepts:** Agricultural yields, agricultural intensification, famines, high-yielding varieties.

**Empirical methods:** Local Polynomial Regressions, Difference-in-Differences, Bartik (shift-share) instrument

### **Deadline to Submit homework 2 on Friday 7.10**

*WEEK 6 (Mon 10.10, Thu 13.10)*

### **Mon 10.10: Technology adoption**

We will discuss challenges related to the adoption of various “technologies” and how this affects economic outcomes, with special applications to agriculture, health and entrepreneurship. Examples of agricultural technologies are hybrid seeds or fertilizer; examples of health technologies are vaccinations and mosquito-nets.

**Concepts:** *Investments, Incentives, Production function, Information, Risk attitudes.*

**Empirical methods:** Randomized controlled trials (RCTs)

**Wed 13.10: Conclusion and course summary** Concluding and wrapping up the material covered in the course, connecting the first and the second parts of the course. Summary of course and preparation for exam.

### **Course examination**

The examination and final grade are based on 2 components:

- **Homework assignments (50% of final grade):** there will be two bigger homework assignments, where students will practice and demonstrate skills learned in the course such as reading and critically evaluating academic papers and understanding empirical methods and types of data relevant for applied development economics.
- **Final Exam (50% of final grade):** The exam and the retake exam will be given on site in Otaniemi. Note that registration is required for the Retake exam.