

# SYLLABUS

## Measuring and Alleviating Poverty and Inequality

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### Course description

Poverty and Inequality reduction is a central objective of economic policies in both developed and developing countries. This course introduces students to the main theoretical and empirical aspects of the economic analysis of poverty and inequality: distributive analysis, poverty and inequality measures and profiles, multidimensional poverty, robustness, pro-poor growth and policies, poverty alleviation, targeting criteria and the distributive effects of price changes and tax reforms, progressivity and benefit incidence analysis, and estimation of individual budget shares and poverty rates.

Each theoretical class is accompanied with guided practices on real data through DASP (Distributive Analysis Stata Package). Participants require a working knowledge of basic statistics and economics. Students are evaluated through 4 assignments (about every three weeks) and an essay.

### General objective

The main aim of this course is to enhance the skills of current or future researchers and officials in conducting poverty and social impact assessments using quantitative micro data and state-of-the-art methods. At the end of this course, participants are expected to be able to prepare and interpret a comprehensive poverty and inequality analysis.

### Specific objectives

Specific objectives will be illustrated at the beginning of each class.

### Instructional approach

For each class, narrated presentations are available. They are accompanied by readings and guided exercises in order to allow the student to understand the notions and concepts. The course includes 2 live Q&A sessions where participants can interact directly with the instructors and other participants.

## Learning steps

In general, the steps of learning consist of:

- Watching the narrated presentation(s)
- Doing the mandatory readings
- Doing the suggested exercises
- Making sure to master the concepts
- Participating actively to the forum
- Supervision strategy

Students are encouraged to ask questions using the forum available for each class. In the case of a more specific problem, students can communicate directly with the teacher by email.

## Content and activities

### 1. Descriptive tools for comparing well-being and poverty

- Space for comparing wellbeing
- Concepts and tools for distributive analysis
  - Ranks
  - Percentiles
  - Cumulative Distribution Function
  - Quantiles Distribution
  - Mean
  - Censored Quantiles Gaps
  - Poverty Gaps
  - Density Histograms
  - Kernel Density

### 2. Introduction to Stata and DASP

- Introduction to Stata
- Introduction to DASP: a Stata package for distributive analysis
  - See how the information required by DASP is related to important issues in welfare economics;
  - See how to generate tabular and graphical output with DASP

### 3. Introduction to basic statistical inferences

- Sample design
- Sampling weight
- Statistical inference and hypothesis testing

### 4. Inequality concepts and measures

- Thinking about inequality
- Measuring inequality
  - Basic axioms
  - Lorenz, Gini and Entropy measures

### 5. Inequality profiles

- Decomposing inequality by population groups
- Decomposing inequality by income sources
- The Shapley decomposition technique

### 6. Poverty indices

- Key notions of distribution
- Principles for measuring poverty
- Common poverty indices
- Illustration using Ugandan data

### 7. Poverty lines

- Relative poverty lines
- Absolute poverty lines
- Subjective poverty lines

### 8. Decomposing poverty and pro-poor growth and policy

- Decomposing poverty by population groups
- Decomposing the change in poverty into growth and redistribution
- Pro-poor growth and pro-poor policy

### 9. Poverty impact of policies and growth

- Targeting

- Group targeting
- Impact of growth on poverty
- Targeting by taxation

#### 10. Progressivity of taxes and benefits

- Concentration curves
- Progressivity of taxes and transfers
- Indices of progressivity
- Redistributive Equity
- The Benefit Incidence Analysis

#### 11. Multidimensional Poverty

- Measurement and aggregation issues
- Human Development Index and Human Poverty Index
- Setting
- Index properties
- Other indices: two examples

#### 12. Intra-household allocation and individual poverty

- Unitary VS non-unitary households in welfare analysis;
- Quick overview of the main collective models for welfare analysis (including main testing hypotheses);
- Recent development:
  - Collective model with children;
  - Nuclear VS Complex households;
- Examples:
  - Individual sharing rules;
  - Per adult equivalent VS Individual Poverty;
  - male VS female; adult VS children

## Mandatory references

To learn or improve your skills with Stata, we strongly encourage you to read the following:

- [Introduction to Stata](#)
- [Impact evaluation using Stata](#)
- [Impact evaluation using Stata | Wepage](#)
- [Stata Preliminary | Learning Stata](#)
- [Introduction to Stata](#)
- Duclos, J. Y., & Araar, A. (2006). [Poverty and equity: measurement, policy and estimation with DAD](#) (Vol. 2). , Springer Science & Business Media (specific chapters or sections are indicated at the end of each class)
- [DASP](#) download from its website or follow the instructions below, by running (in Stata):  
*set more off*  
*net from c:/dasp*  
*net install dasp\_p1, force*  
*net install dasp\_p2, force*  
*net install dasp\_p3, force*  
*net install dasp\_p4, force*