# Public finance

## Prof. Duccio Gamannossi degl’Innocenti

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to introduce the students to the main concepts of public economics and public finance by means of microeconomic analysis and by illustrating relevant empirical data. The standard economic rationales for government intervention in market economies will be presented along with its possible Pareto improving effect on welfare. The trade-off between the potential welfare-enhancing government intervention and the distortionary effects of its policy instruments will be discussed. The course covers market failures, political economy, tax policy and inequality, social insurance programs, social security, efficiency of taxation, the impact of taxes on economic behavior, and the interaction between different levels of government. Emphasis will be devoted to allowing direct student interaction with the models presented by means of mathematical software.

At the end of the course students will:

– Understand the main drivers of government interventions, public goods, externalities and public expenditures;

* Know theories that explain the role of government in the provision of welfare programs, social insurance, and in redistribution policies;
* Be aware of stylized facts about key economic variables that have historically motivated government intervention and how the change of the variable dynamics is likely to affect government programs in the future;
* Know key concepts characterising types and properties of taxes and subsidies that might be implemented by the state, their impact on economic behaviour and their effects on welfare;
* Be able to explain the economic contents and trade-offs captured by the models presented, discuss their assumptions, relevance, and limitations;
* Have skills to use the model presented in the course as a framework to evaluate the current policy debate (scientific literature, project reports, journal articles, etc.) critically and in an informed fashion;
* Be able to integrate the content of the course in their academic work, for example in analyses that are part of their bachelor’s thesis.

***COURSE CONTENT***

* Introduction to public finance, review of analytic tools;
* Role of Government, Market Failures;
* Political Economy;
* Social Security;
* Life-Cycle model and the Retirement Problem, Intertemporal Consumption, Social Security Systems, Effects of Social Security on Economic Decisions
* Inequality and Redistribution;
* Rationales for income redistribution, Expenditure Incidence, In-Kind vs. Cash transfer, Income maintenance and work incentives;
* Framework for Tax Analysis;
* Tax Progressivity, Tax incidence and Tax Efficiency in Partial Equilibrium Setting, Optimal Taxation of Commodities and Income, effect of Personal Taxation on Labour Supply, Tax Compliance and Enforcement;
* Public Finance in a federal system.

***READING LIST***

H. Rosen-T. Gayer, *Public Finance,* McGraw Hill Education. You are welcome to buy any edition of the textbook.

Chapters[[1]](#footnote-1): 3, 4, 5, 6, 7, (9), 11, 12, 13 (pp.270-280), 14 (pp. 296-313), 15 with Appendix A, 16, 18 (pp. 407-423), 22 (pp. 499-510)

The exam will be based on the material from the slides, excercises and SageMath notebooks. The slides are not self explanatory and attending lectures is highly recommended. The textbook is intended to provide a wider understanding of the course program and is essential for the non attending students. All the material required for the exam will be available on Blackboard.

***TEACHING METHOD***

On-line lectures (streaming and/or screencast videos), SageMath notebooks.

***ASSESSMENT METHOD AND CRITERIA***

Grades will be based on a midterm exam (50 percent) and a final exam (50 percent). The two parts include both open questions and exercises. Answer to open questions might entail the illustration of a relevant economic model, its application to different scenarios and the illustration of its economic interpretation. Exercises will test the proficiency of the student in using the model to analyze positive and normative questions. The student is expected to prove a good working knowledge of all the material covered by the course. The exam will be closed-notes, only pen, calculator and ruler allowed.

***NOTES AND PREREQUISITES***

Microeconomics, macroeconomics, and mathematics.

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Office Hours: Tuesday 17:00-19:00, to be booked [here](http://dgdi.me/#teaching)

1. Chapters and pages refer to the Tenth Global Edition (2014) of the book. [↑](#footnote-ref-1)