

Principles of Economics 2019-2020

Programme

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Academic Year 2019-2020

All the documents in the list below are available at the course webpage:
<https://elearning.ec.unipi.it/course/view.php?id=1503>.

How to study.

Study the book, watch the linked videos, and answer all Units' "Questions" for self-evaluation. On the e-book, you can check the correct answer. The Leibnizes and Additional material (on the folder "Leibnizes" and "Additional Materials") are compulsory. Check the slides of the units and of the topic hours. Do all the problem sets, useful for the exam and self-evaluation.

Mathematical Appendix – LEIBNIZES

These appendixes give a mathematical formulation and/or derivation of fundamental microeconomic results that encompass topics of all the course, and which are a characterizing competence of any microeconomics course in economics department.

Doing Economics

This section introduces a more modern way of approaching economic problems. Using the software R, it is possible to obtain statistically strong results in a fairly simple way, while also introducing one of the more used, open-source, software used in economic research.

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Evaluation Methods

The exam is made of three parts, all of them are mandatory:

- A written exam (60%)
- An oral exam (30%)
- An assignment/homework (10%)

These written exams are made of two parts:

- a. 16 MCQs (max 3 points each) + 2 True&False questions (max 6 points each);
- b. 2 open questions (max 10 points each).

The two open questions will be about the videos discussed in the Topic Hours and will ask for an explanation and discussion. The full list of videos is as follows:

1. Thomas Piketty: The long-run economics of wealth inequality;
2. James Heckman: The economics of inequality and childhood education.
3. Lisa Cook: What promotes or kills innovation?
4. Lynne Kiesling, a historian of economic thought, discusses Joseph Schumpeter
5. Suresh Naidu: Why some countries grew rich
6. Juliet Schor: Why do we work so hard?
7. Juan Camilo Cárdenas: Invisible hands working together
8. Richard Freeman: You can't outsource responsibility
9. Michael Sandel: Why we shouldn't trust markets with our civic life

Further details on the text of the exam will be provided on the course webpage.

The **oral exam** is only about theory (no exercises). To be admitted to the oral exam, student must obtain a mark of 44/80 summing the two parts and at least half points in each part (30 and 10, respectively).

The **assignment** follows the Doing Economics book. Each student must choose one of the topic and replicate all the step. The final outcome will be to upload a short essay **here**, at least two days before the exam (the same deadline of the formal enrolment to the exam). The tutor, Michele Ceraolo, is available for information about the assignment.

Below, for each Unit, there is a brief description of the related documents.

Unit 1 – The capitalist revolution

Empirical data on common economic indicators and the importance of this approach in the economic analysis. Take a glimpse at absolute and comparative advantages and some topics of interest today such as causality, inequality, long run growth and its environmental impact. Where to study:

- Unit 1 – all,
- Exercises 1.4, 1.10, 1.11 from the book;
- Slides of Unit 1.
- Exercises 1-3, Problem Set 1.
- Economists in Action videos:
 - Thomas Piketty: The long-run economics of wealth inequality;
 - James Heckman: The economics of inequality and childhood education.
 - Lisa Cook: What promotes or kills innovation?

Unit 2 – Technology, population, and growth

What an economic model is by looking at the Classical economics and at Schumpeter's idea of creative destruction. We introduce the concepts of costs and profits, innovation and the diminishing average product of labour. Where to study:

- Unit 2 – all,
- Leibniz L2.2.1, L2.7.1,
- Exercises 2.2, 2.3, 2.6 from the book, answer all the Unit's "Questions" for self-evaluation;
- Slides of Unit 2,
- Problem Set 1 (Ex. 3-10).
- Economists in Action videos:
 - Lynne Kiesling, a historian of economic thought, discusses Joseph Schumpeter
 - Suresh Naidu: Why some countries grew rich

Unit 3 – Incentives and the Moral Economy

Analysis of individual choices, budget constraints, the feasible frontier and the solution of constrained maximization in individual behavior. Marginal rate of substitution and marginal rate of transformation.

- Unit 3 – all;
- Exercises 2.2, 2.3, 2.6 from the book;
- Leibniz L3.1.1, L3.1.2, L3.1.3, L3.2.1, L3.4.1, L3.5.1, L3.7.1;
- Slides of Unit 3;
- Problem Set 2.
- Economists in Action video:
 - Juliet Schor: Why do we work so hard?

Unit 4 – Social interactions

Game theory is the starting point for behavioral economics, which is slightly introduced in this unit. Dominant strategy, the prisoner's dilemma, the resulting Nash equilibria and the problem of free riding. Focus on altruistic preferences and the concept of fairness.

- Unit 4 – all;
- Exercises 4.1, 4.2, 4.4, 4.9, 4.10, 4.12, 4.14 from the book;
- Leibniz L4.4.1;
- Slides of Unit 3;
- Problem Set 3.
- Economists in Action video:
 - Juan Camilo Cárdenas: Invisible hands working together

Unit 5 – Property and power: Mutual gains and conflict

What happens when there is more than one actor in the economy and how they trade, depending on their initial endowments. How we evaluate the outcome of economic interactions?

- Unit 5 – all;
- All the Exercises from the book (solutions are available on the elearning);
- Leibniz L5.4.1, L5.4.2, L5.7.1, L5.8.1;
- Slides of Unit 5;
- Problem Set 3.

Unit 6 – The firm: Owners, managers, and employees

Investigation of the labour market and the basic microeconomic model used for the determination of wage.

- Unit 6 – all;
- All the Exercises from the book (solutions are available on the elearning);
- Leibniz L6.6.1, L6.7.1;
- Slides of Unit 6;
- Problem Set 4.
- Economists in Action video:
 - Richard Freeman: You can't outsource responsibility

Unit 7 – The firm and its customers

How a firm decides the quantity to produce (and to sell) and which price it chooses for its good. Demand elasticity, firms' market power and the reasons behind innovation, diversification and advertisement.

- Unit 7 – all;
- All the Exercises from the book (some solutions are available on the elearning);
- Leibniz L7.3.1, L7.4.1, L7.6.1, L7.8.1;
- Slides of Unit 7;
- Problem set 5.

Unit 8 – Supply and demand: Price-taking and competitive markets

Price-taker firms, competitive equilibrium and what impacts trade, reallocation, supply/demand shocks and taxes have on the equilibrium. Distinction between price-taking and price-setting firms.

- Unit 8 – all;
- Goolsbee, Levitt and Syverson, Chapter 8, pp. 312-314 (Individual firm's supply);
- Exercises 8.3, 8.5, 8.6, 8.7;
- Leibniz L8.4.1;
- Slides of Unit 8;
- Problem set 6.

Unit 11 – Rent-seeking, price-setting, and market dynamics

Definition of exogenous and endogenous shock, how and when a market is not in equilibrium. Price makers behavior and rent extraction may bring to a new, competitive, equilibrium. Innovation, differences between short- and long-run equilibria and elasticities.

- Unit 11: 11.1 and 11.3;
- Exercises 11.1, 11.2;
- Slides of Unit 8;

Unit 12 – Markets, efficiency, and public policy

Market failures and missing market. Externalities and public good. Bargaining, policies and income distribution.

- Unit 12 – all;
- All the Exercises from the book;
- Slides of Unit 12;
- Problem set 6.
- Economists in Action video:
 - Michael Sandel: Why we shouldn't trust markets with our civic life