

## Public economics CM

Course title - Intitulé du cours	Public economics CM
Level / Semester - Niveau /semestre	M1 / S2
School – Composante	Ecole d'Economie de Toulouse
Teacher - Enseignant responsable	CREMER Helmuth
Other teacher(s) - Autre(s) enseignant(s)	Chanwoo Kim
Other teacher(s) - Autre(s) enseignant(s)	CARRER Luisa
Lecture Hours - Volume Horaire CM	30
TA Hours - Volume horaire TD	10,5
TP Hours - Volume horaire TP	0
Course Language - Langue du cours	Anglais
TA and/or TP Language - Langue des TD et/ou TP	Anglais

### **Teaching staff contacts - Coordonnées de l'équipe pédagogique :**

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### **Course's Objectives - Objectifs du cours :**

Public economics studies the role of government in a market economy. The underlying setting is that of a decentralized economy in which economic decisions are coordinated by prices, which in turn are determined by "free markets". In reality, the public sector typically plays a significant role in these market economies. We examine why the government has to supplement the market mechanism, and how his intervention can be justified by efficiency and equity consideration. More significantly we study how policies should be designed. Which goods should be provided by the public sector? At what levels and at which prices? How should taxes and transfers be designed? Which tax instruments do we need? Do environmental considerations justify public intervention? If yes, under which form? These are some of the questions which will be dealt with.

The course provides an introduction to public economics. It is designed for advanced undergraduate students (with a good background in microeconomic theory).

### **Prerequisites - Pré requis :**

Solid knowledge of microeconomics; basic calculus.

### **Practical information about the sessions - Modalités pratiques de gestion du cours :**

Computers accepted (anything which doesn't make noise). Class participation is highly recommended (if the covid situation permits). Silence in the classroom is strictly enforced and late arrivals are not tolerated.

### **Grading system - Modalités d'évaluation :**

Final exam. The exam covers all the material mentioned in class *and* in the slides.

### **Bibliography/references - Bibliographie/références :**

The course is based on the textbook "Intermediate Public Economics" by Jean Hindricks and Gareth Myles, 2nd edition (MIT Press 2013). Additional material, including handouts (copies of slides), is available on "Moodle". The slides are meant to be annotated and supplemented by your notes.

### **Session planning - Planification des séances :**

#### Outline

#### 1. Introduction: The role of the public sector in a market economy (HM ch. 1,2,4, 5)

- a. Some facts and data
- b. Welfare theorems
- c. Market failures
- d. Redistribution and the equity-efficiency tradeoff
- e. Paternalism and "merit goods"; example of "sin taxes".

#### 2. Public goods (HM6)

- a. Definitions
- b. Pareto efficient allocation: the Samuelson condition
- c. Decentralization and equilibrium
  - i. Lindhal equilibrium
  - ii. Voluntary contribution
  - iii. Preference revelation mechanisms
- d. Excludable public goods

#### 3. Political economy (HM11)

- a. Introduction: voting and collective choice
- b. Arrow's impossibility theorem
- c. Majority voting
  - i. Definitions
  - ii. Median voter theorem
  - iii. Example: vote and public good provision
  - iv. Voting over more than one dimension: illustration

#### 4. Externalities (HM 8)

- a. Definitions
- b. Problem: market failure
- c. Externality examples
- d. Remedies
  - i. "command and control"
  - ii. Taxes
  - iii. Markets for pollution permits
- e. Illustrations
  - i. Partial equilibrium
  - ii. Production externality
- f. Coase theorem

#### 5. Cost benefit analysis (HM25)

- a. Background: consumer surplus, equivalent and compensating variation
- b. Hicks-Kaldor compensation principle
- c. General rule
- d. Specific problems: discounting, value of time, value of life, etc.

#### 6. Taxation and efficiency (HM15)

- a. Desirable characteristics of tax systems
- b. Deadweight loss

#### 7. Positive analysis: tax incidence (RS 12 and 13, GR19)

- a. Introduction
- b. Perfect competition
- c. Monopoly

#### 8. Optimal taxation: Commodity taxes (HM 15)

#### 9. Social insurance and retirement (HM23)

- a. Introduction
- b. Pay-as-you-go vs funded systems; Bismarck vs. Beveridge

c.Rationale for public pensions

d.Simple model

e.Reform of pension systems

**Distance learning – Enseignement à distance :**

Depending on the covid situation in January 2022 all or part of the lectures may be given online. If technically feasible a combination of live classes and remote attendance for part of the students may also be considered.

Either way the slides are already quite self contained, especially when used together with the textbook. Students can ask questions during the help desk (organized by TA's possibly online). When part or all of the class is taught online some additional Q&A session may be programmed if requested.

A large number of solved exercises are provided on moodle and only part of them are covered in the exercise classes. These, together with the earlier exams provide plenty of opportunities for self testing.

Please contact the instructor or TA's if you have trouble accessing the course material. If necessary we'll provide access to a dropbox folder with all the relevant material. Similarly we'll do our best to help if you are experiencing any kind of problem.