

# INSTITUTO TECNOLÓGICO AUTÓNOMO DE MÉXICO

## Department of Economics

Eco-15101-001  
Public Finance  
(*Finanzas Públicas*)  
Class Time: 11:30 AM – 1:00 PM  
Monday, Wednesday

Place: RH, Salon 109

Professor Andrei M. Gomberg  
e-mail: gomberg@itam.mx  
Phone: 5628-4000, extension 2917  
Office Hours: 3 PM – 4 PM  
Monday, Wednesday  
**and by appointment**  
Place: ST

## INTRODUCTION

The purpose of this class is to study the role the government plays in the economy. We shall start with a review of standard results in welfare economics and examine assumptions under which these hold. Relaxing these assumptions we shall examine conditions in which an outside intervention may improve public welfare. We shall proceed to consider other possible objectives of a government intervention, as well as the political economy issues having to do with actual functioning of a government. In the next part of the class we will consider issues dealing with taxation necessary to generate government revenue. Finally, time permitting, we may explore problems relating to existence of multiple governments. Throughout the class an attempt will be made to relate theoretical models with the way actual governments work.

## PREREQUISITES

This is an intermediate-level course. Consequently, a basic knowledge of fundamental microeconomic concepts and methodology will be assumed. Mathematical requirements will be kept to a necessary minimum. Nonetheless, confident knowledge of basic single-variable calculus, some idea of what constitutes a proof and ability to read, understand and draw graphs will be required.

## MAIN TEXTBOOK

- Joseph Stiglitz, *Economics of the Public Sector*, 3<sup>rd</sup> edition, W.W. Norton & Co., 2000 or an equivalent Spanish-language edition.

Other readings will be periodically assigned.

## EXERCISES AND HOMEWORKS

Homework will be assigned throughout the semester and should be submitted on time. Selected homework **may be graded** (I will decide what to grade **after** you submit the homework). Solutions to important exercises will be provided in class, and you are welcome to come to me with any questions about any of the problems.

## **EXAMS AND GRADING**

There will be a midterm and a final examination in this class. At least one of the midterm exam questions will be a take-home assignment to be specified later. The final examination will be cumulative, in the sense that exam questions may refer to any material covered from the beginning of the semester. No make-up opportunities will be provided, unless an **extremely** valid medical or other reason can be **documented** (the documentation will be checked). Note also, that while I am not going to be taking regular attendance, a lot of the material presented will not follow any text closely. Therefore, class attendance is strongly encouraged (translation: no, you can't take this class by e-mail, while at the same time improving your Arabic in Morocco, and your strict boss at work will have to miss you a lot more than twice a semester).

The final grade will be determined as follows:

Grade on the midterm - 45%

Grade on the final - 55%

## **OFFICE HOURS**

Besides the scheduled office hours, students are encouraged to schedule appointments to discuss any matters relevant to the class. I can always be reached by e-mail and will respond as soon as possible.

## **LANGUAGE AND OTHER MATTERS**

The language of instruction in this class is **English**. However, you are welcome to ask questions or submit any exams and/or homework in Spanish. If you do not understand anything I say or write in class or in a private discussion after class and during the office hours, feel free to interrupt at any time and ask for clarification. I would also appreciate any comments on the material and style of the class that you can make.

## **WEB PAGE**

The homepage for this class is located at <http://cursos.itam.mx/gomberg/PF09>. All exercises, notes, grades, announcements, etc. will be posted there. Make sure to consult it regularly.

## **APPROXIMATE OUTLINE OF THE CLASS**

### **Part I. The Role of Government**

#### 1. Introduction

What is this class about? Public Sector in a Mixed Economy  
Positive and Normative Analysis  
What do governments do? What should they do?

#### 2. Welfare Economics and Market Failure.

##### 2.1. Welfare Economics.

- 2.1.1. Graphical Analysis: Edgeworth Box.
- 2.1.2. Efficiency and First Welfare Theorem
- 2.1.3. Redistribution and Second Welfare Theorem

##### 2.2. Market Failure.

- 2.2.1. Imperfect competition
- 2.2.2. Externalities and public goods
- 2.2.3. Incomplete markets
- 2.2.4. Problems of information

#### 3. Social Choice and Public Choice.

- 3.1 Social Choice (informal): What is the social objective?
  - 3.1.1. Impossibility Results in Social Choice.
  - 3.1.2. Social Choice and Implementation
- 3.2. Public Choice: What will the government do?

### **Part II. Public Expenditure.**

#### 4. Public Goods and Publicly Provided Private Goods

- 4.1. Examples.
- 4.2. Defined.
- 4.3. Efficient Provision of Public Goods.
- 4.4. Voluntary Provision of Public Goods.
- 4.5. Voting over Public Goods.
- 4.6. Lindahl's Solution and imperfect information.
- 4.7. Implementation.
- 4.8. Publicly Provided Private goods: Why Public Provision? Rationing.

#### 5. Externalities.

- 5.1. Defined
- 5.2. Remedies
  - 5.2.1 Pigouvian Taxation.
  - 5.2.2. Creation of New Markets: property rights assignment.
    - 5.2.2.1. Example: Pollution Permits.

### 5.2.3. Regulation

#### 6. Income Redistribution and Social insurance.

##### 6.1. Measurement.

##### 6.1. Redistribution: Equity vs. efficiency; poverty reduction.

##### 6.2. Time and Uncertainty. Social insurance. Social Security and Healthcare

#### 7. *Political Economy (time permitting).*

##### *7.1 Introducing the spatial model.*

##### *7.1. Voting.*

##### *7.2. Elections and political systems*

#### 8. Cost-benefit Analysis.

### **Part III. Government Revenue**

#### 9. Taxation.

##### 9.1. Types of taxes.

##### 9.2. Taxation and efficiency.

##### 9.3. Tax incidence and income distribution

##### 9.4. Other criteria for tax design

##### 9.5. Optimal taxation.

##### 9.6. Taxation in practice.

### ***Part IV. Multigovernment Public Finance (time permitting).***

#### *10. Public Finance with Multiple Governments.*

##### *10.1. Locally Provided Goods and Services; local redistribution.*

##### *10.1.1. Example: Schooling*

##### *10.1.2. Example: Localized income redistribution*

##### *10.2 Community Formation.*

##### *10.3. Tiebout Conjecture.*

##### *10.4. Competition between governments: is it good or bad?*

##### *10.5. Some International Issues.*