

McGill University

Department of Economics

Public Sector Economics 1(ECON408)

Fall 2022

Instructor Contact Information:

Dr. Lingling Zhang

E-mail: lingling.zhang@mcgill.ca

Facebook: /lingling.zhang.9461

Twitter : @linglingzhang3 (Hashtag : #mge40822)

Office : LEA434

Office hours: The instructor office hours are in-person this semester. Online office hours might be added before the exams and the deadline of the submission of the course paper.
Tuesdays and Thursdays 11:55am – 12:45pm; LEA434.

Regular classes:

Times: Tuesdays and Thursdays 10:05am-11:25pm

Room: SADB 2/36

All classes will be offered in-person and will be automatically recorded if the room is well equipped.

Note that the instructor is not responsible for any recording technical problems. Recordings will be posted on MyCourses and will serve as a complement to the lectures only. Attending classes is highly recommended. Please be aware that providing an equal online version of this course is not allowed at McGill.

Teaching Assistant: Yike Ding

Email: yike.ding@mail.mcgill.ca

TA office hours: TBA (will be posted on MyCourses/ Announcements)

Textbook:

1. Rosen, Wen, and Snoddon: *Public Finance in Canada* (any edition)

Reference books:

1. David N. Hyman *Public Finance: A Contemporary Application of Theory to Policy*
2. John Leach: *A Course in Public Economics*

Textbooks are all optional. You may find them online or in the library. The textbooks are not ordered at McGill bookstore.

Course Overview: This course is designed to provide the fundamental principles and tools for analyzing the role that government plays in the economy. We will analyze government intervention in a market economy and study the impact of government expenditure programs and taxation systems on the welfare and behavior of its citizens. The course will cover a wide range of issues in public sector economics including efficiency, externalities, public goods, public choices, taxation and asymmetric information, etc. This course will also offer discussing on current policy debates, such as natural resources, global climate change, and taxation.

Supplementary Readings: I will supplement the textbook with several readings from newspapers, magazines, or academic journals. Most of these will be available on MyCourses.

Course Evaluation:

Midterm examination30%

Written Project30%

Final examination40%

Examinations: There will be two **in-person** exams.

Midterm exam is scheduled on **Oct. 20th, 2022**, and it is in-person exam during the class time.

Final exam will be scheduled by the university during the final exam period.

There will be a supplemental examination which will be worth 100% of your final grade.

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/ for more information).

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Written Project (Term Paper): The due date for submitting the final version of your paper will be at 5:00pm on December 5th, 2022. Your paper will be worth 30% of your final grade. No exceptions will be made concerning this due date except with valid medical notes prepared by professionals.

In your term paper you will investigate an important topic in public sector Economics. Feel free to work in teams (each team should not include more than 5 members). You may choose to work independently.

A proposal including the topic of your term paper and the list of all members in your team should be submitted to under **MyCourses/Assignments/Proposal** no later than 5:00pm **Oct. 7th, 2022**. No tardy proposal will be accepted.

The final version of your term paper should not exceed 10 pages and should be double spaced; single sided with 12-point font. Feel free to ask me questions that are not included here. **The project guideline and the grading criteria** will be posted on MyCourses.

Preliminary Course Outline

Part I The Economics Basics for Government Activity

Section 1. Introduction

1. Introduction to Public Finance in Canada
2. The Economic Roles of Government

Section 2. Welfare Economics

1. Free market and Efficiency
 - a. The first and second fundamental theorem
 - b. Pure exchange economy
2. Government Interventions
 - a. Taxes and subsidies
 - b. Monopoly power

Section 3. Externalities and Government Policies

1. Externalities
 - a. Positive and negative externalities
 - b. Coase theorem
 - c. On-line experiment: The Herd Immunity Game
2. Government Interventions
 - a. Taxes vs. Subsidies
 - b. Case study: Climate Change: Cap and Trade vs. Carbon Tax
 - c. On-line game: The Carbon Trading Game

Section 4. Public Goods

1. Definition
 - a. Nonrival and nonexclusive
 - b. Four types of goods
 - c. Market failure
 - d. The Samuelson Condition
2. The free rider problem

3. Tragedy of the commons
4. On-line experiment: Voluntary contribution to a public good

Section 5. Public Choice

1. Public choice theory
2. Political marketplace
3. Different voting procedures
 - a. Lindahl equilibrium
 - b. The voting paradox
4. Bureaucratic behavior

Section 6. Tax Theory and Tax Policy

1. Government finance
2. Taxation, prices, and efficiency
3. The welfare cost of taxation
4. The optimal taxation

Section 7. Asymmetric Information

1. Adverse selection
2. Moral hazard
3. Preference revelation
4. An on-line experiment

Section 8. Fiscal Federalism

1. The Tiebout Model
2. Interprovincial Fiscally induced migration
3. Optimal Federalism
4. Intergovernmental Grants in Canada

Section 9. Environmental Risk Assessment

1. Environmental Economics
2. Cost-benefit Analysis in Environmental Decision Making
3. ERA in the US and EU
4. ERA in Canada
 - a. Case Study: Environmental Impacts of Antibiotics in BC's Salmon Farming