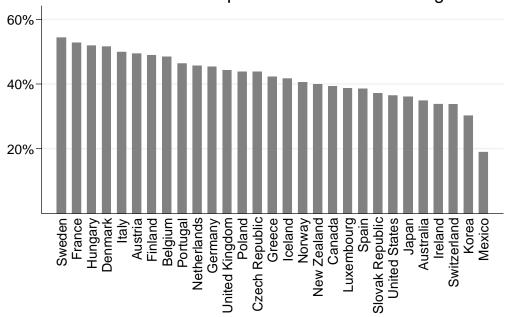
University of Waterloo Department of Economics

Course Outline

ECON 101.003: Introduction to Microeconomics Fall 2016

General Government Expenditures as a Percentage of GDP



Source: OECD. Year: 2006.

Course Introduction: Governments of industrialized countries take part in a wide range of economic activities. Much of economics seeks to uncover whether this extensive government involvement benefits or hurts these countries' citizens. In this introductory microeconomics course, we study the key concepts and tools of economics through the lens of the question: How big should the government be? Economic rationales for government involvement in economic activity motivate our study of consumer choice, production, competitive interaction, strategic interaction, and welfare measurement.

Instructor: Mikko Packalen

Office Hours: Usually on Thursdays 9am-noon in HH 205, but please check the course website for possible weekly changes (learn.uwaterloo.ca); and by appointment.

Phone: (519) 888 4567 ext. 33431

Email: packalen@uwaterloo.ca; subject line must state "ECON 101"; the message must include your full name and ID number and should come from your .uwaterloo account (so that I know it's really you).

1. Course Description

This course provides an introduction to microeconomic analysis relevant for understanding the Canadian economy. The behaviour of individual consumers and producers, the determination of market prices for commodities and resources, and the role of government policy in the functioning of the market system are the main topics covered.

2. Course Objective

The objectives of this course are for students to (a) understand the need for people to make choices and together work towards overcoming the universal problem of scarcity; (b) appreciate the relevance of economics in a changing world; and (c) develop the capacity to apply critical reasoning to economic issues.

3. Course Materials

The core course materials are: Problem Sets, Lectures, Class Notes, Slides, and the iClicker. These are all <u>complementary to one another</u>; none of them is a substitute to another.

4. Lectures

Tuesdays, 6.30-9.20pm, DC 1350 (because of University "Study Days" following the thanksgiving Holiday, there is no class on October 11th; the make-up class is on Thursday October 13th, 6.30-9.20pm, DC 1350).

5. Problem Sets

Problem sets are distributed weekly through learn.uwaterloo.ca.

6. Class Notes and Slides

Class notes and slides are distributed through learn.uwaterloo.ca. The distributed slides do not include all slides shown in class. The notes are not a substitute to attending lectures.

7. Tentative Class Schedule and List of Main Topics

INTRODUCTION

- Scarcity of Resources, Tradeoffs
- Economists: "Everyone Optimizes"
- What we need to learn to examine the question "How Big Should the Government Be?"

WEEK 1: A Model of Consumer Choice with One Good

- Total Willingness to Pay
- Marginal Analysis, application 1: Price vs. Marginal Willingness to Pay
- Marginal Cost, Marginal Benefit
- Demand Curve
- Sunk Cost

PROBLEM SET 1 DUE

WEEK 2: A Model of Consumer Choice with Multiple Goods

- Indifference Curves, Marginal Rate of Substitution
- Budget Constraint, Opportunity Cost

- Marginal Analysis, application 2: The Marginal Rate of Substitution Condition

PROBLEM SET 2 DUE

WEEK 3: The Competitive Model of Interaction (as a Depiction of the Market Economy)

- Budget Constraint with an Endowment
- Exchange
- Competitive Equilibrium

PROBLEM SET 3 DUE

WEEK 4: A Comparison of a Market Economy and a Command Economy

- How to Compare Allocations, approach 1: Pareto Efficiency
- The First Welfare Theorem
- How good is the allocation with vs. without government intervention?

MIDTERM EXAM 1

PROBLEM SET 4 DUE

WEEK 5: The Utility Function (an Alternative Representation of Consumer Preferences)

- Utility Function
- Marginal Utility
- Demand Function

PROBLEM SET 5 DUE

WEEKS 6-7: Models of Strategic Interaction

- Strategy
- Payoffs, Payoff Matrix
- Best Response
- Nash Equilibrium
- Extensive Form Game Tree
- Subgame-Perfect Nash Equilibrium

PROBLEM SETS 6-7 DUE

WEEK 8: External Effects as a Rationale for Government Intervention

- Externalities
- Public Goods
- How good is the allocation with vs. without government intervention?

MIDTERM EXAM 1

PROBLEM SET 8 DUE

WEEK 9: Production and Competition

- Production Possibilities Frontier
- Production and Trade, Comparative Advantage
- Firm Objectives and Constraints
- Variable Costs; Fixed Costs; Revenue; Profit
- Monopoly
- Marginal Analysis, application 3: Marginal Cost, Marginal Revenue
- Cost Curves, Average Costs, Short-Run Costs vs. Long-Run Costs
- Perfect Competition

WEEK 10: A Model of Interaction with Consumers and Production

- Market Demand Curve, Supply, Supply Curve
- A Simple Model of Market Equilibrium
- How to Compare Allocations, approach 2: Consumer, Producer and Total Surplus
- How good is the allocation with vs. without government intervention?

PROBLEM SET 9 DUE

WEEK 11: Imperfect Competition

- Monopoly
- Oligopoly

PROBLEM SET 10 DUE

WEEKS 12: Asymmetric Information and Behavioral Economics as Rationales for Government Intervention:

- Asymmetric information
- Inequality
- Behavioral aspects of decision-making

FINAL EXAM

8. Textbook

My lectures and problem sets <u>do not follow a textbook</u>. No textbook is <u>required for the Midterm</u> Exams. No textbook is required for the Final Exam.

To the benefit of those who still would like to study using a textbook as well, I will mention some recommended textbooks in the first class.

9. Assessments

The mark breakdown (does not include bonus points from iClicker):

Midterm Exam 1	Tuesday Oct 4 th , in class	20%
Midterm Exam 2	Tuesday Nov 1 st , in class	20%
Final Exam	TBA	60%

Notes:

- In-class participation and knowledge, as measured by iClicker use, can increase a student's grade by up to 8 grade points. For example, if a student's grade is 85 based on exams, but student has answered all iClicker questions perfectly, the final grade will be 93%. The grade point increase is given by the formula 8*(number of questions answered correctly)/(total number of questions).
- Midterm Exams 1 and 2 and the Final Exam are based on material in Lectures, Problem Sets, Class Notes, and Slides.
- Exams are cumulative; the questions are based on any material studied in the course so far. For example, you should expect that some (perhaps even half) of the questions in midterm 2 are based on material covered in lectures before midterm 1.
- The date and time for the final exam will be set by the Registrar at a later time.
- Students are expected to be available during the exam period to write the final exam. Travel plans are not an acceptable reason for requesting an alternative final exam. See http://www.registrar.uwaterloo.ca/exams/finalexams.html for details.

10. Additional Information

1. It is the responsibility of students to ensure that they write exams in the location, date, and time assigned to their section. Students writing exams in the wrong section will be assessed a 20% penalty on the final exam grade. There will be no accommodation for possible differences in exam material or content.

2. Missing the Final Exam Due to Illness

• Missing the final exam is a very serious matter which automatically results in a zero mark for the exam itself and possibly a failing mark for the course. Read the department policy on deferred final exams http://economics.uwaterloo.ca/DeferredExams.html for instructions.

3. Missing a Midterm Due to Illness During the Term

• If a student misses a midterm due to illness and has valid documentation (approval required), the weight of the missed midterm will be shifted to the final exam. Without valid and timely submitted documentation, the student will receive zero for the missed midterm. Midterms will not be rescheduled *under any circumstances*.

4. Fee-Arranged Issues

Students are responsible for administrative matters concerning their course registration including fee arrangements. No make-up work or remedies will be given for losses of access to LEARN and academic consequences arising from administrative issues with the Registrar's Office.

5. Economic Clinic

During the terms when it is offered, the walk-in Economic Clinic offers free tutorial services to ECON 101 students (all sections). Check with the department (economics.uwaterloo.ca and bulletin boards) for availability.

6. Classroom Protocols

- No private conversations in class will be tolerated.
- Turn off all cell phone communication devices and put them away for the duration of the lecture
- Photographic devices are not permitted in class; this is a University regulation.
- In order to maintain a learning environment in this classroom, I expect the highest level of courtesy and professional behaviour from every student.

11. University Statements

Economics Department Deferred Final Exam Policy

Deferred Final Exam Policy found at https://uwaterloo.ca/economics/current-undergraduates/policies-and-resources/deferred-final-exam-policy.

Cross-listed course

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

Academic Integrity

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline (https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71)

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read <u>Policy 70 - Student Petitions and Grievances</u> (https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70), Section 4.

Appeals: A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read <u>Policy 72 - Student Appeals</u> (https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-72).

Other sources of information for students:

Academic Integrity website (Arts)

https://uwaterloo.ca/arts/current-undergraduates/student-support/ethical-behaviour

Academic Integrity Office (UWaterloo)

https://uwaterloo.ca/academic-integrity/

Accommodation for Students with Disabilities

Note for students with disabilities: The AccessAbility Services office (https://uwaterloo.ca/disability-services), located on the first floor of the Needles Hall extension, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.