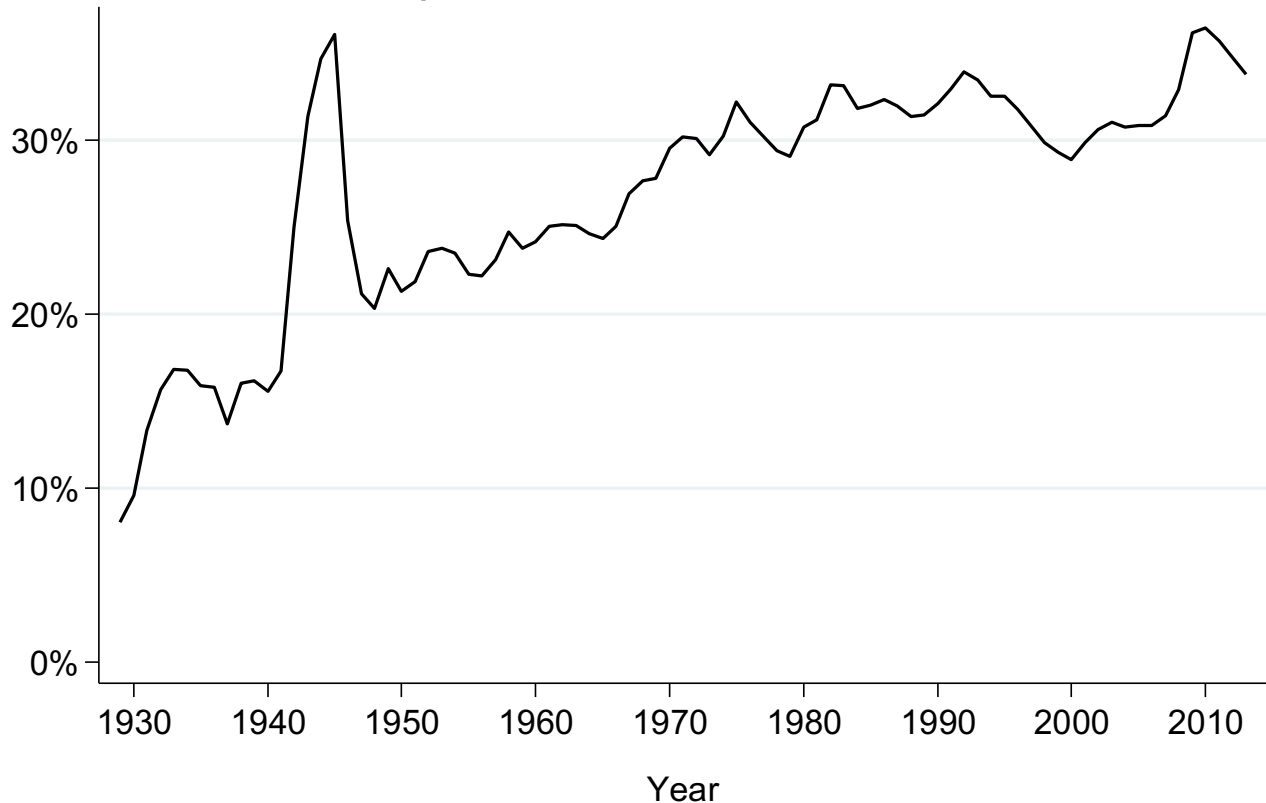


ECON 441:  
**Public Economics**

## Government Expenditures as a Share of GDP in the U.S.



Source: Bureau of Economic Analysis

**Course Introduction:** Governments of industrialized countries are involved in an increasing array of economic activities. This course documents the scope of government involvement in economic activities and examines the economic rationales for it. We consider how rising inequality, departures from consumer rationality, externalities, non-rivalry, and asymmetric information motivate various government policies. The applications include (1) education as a potential solution to rising inequality, (2) production of ideas and stagnation of economic progress, (3) potential impacts of artificial intelligence on public policy, and (4) the distributional impacts of climate change and carbon taxes.

**Instructor:** Mikko Packalen, Associate Professor

**Office Hours:** Usually on Tuesdays and Thursdays 8am-10am (via Learn), but please check the course website for possible weekly changes ([learn.uwaterloo.ca](http://learn.uwaterloo.ca)); and by appointment.

**Email:** [packalen@uwaterloo.ca](mailto:packalen@uwaterloo.ca); subject line should state “ECON 441”; the message should come from your .uwaterloo account (so that I know it’s really you).

## 1. Tentative List of Topics

Part I: **INTRODUCTION** (a motivation and an example of current policy debates)

Topic 1: **Economic Progress and Government Intervention in the Past Century**

Topic 2: **Recent Developments in Growth and Inequality**

Part II: **THEORY** (rationales for government intervention, with an eye toward applications)

Topic 3: **The Rational Behavior Assumption vs. Behavioral Economics**

Topic 4: **The First Welfare Theorem**

Topic 5: **Externalities**

Topic 6: **Nonrivalry and Excludability**

Topic 7: **Asymmetric Information: Adverse and Advantageous Selection**

Part III: **APPLICATIONS**

Topic 8: **Education**

Topic 9: **Health Care**

Topic 10: **Science & Innovation**

Topic 11: **Climate Change**

Topic 12: **Covid-19**

## 2. Course Description

This course examines to what extent government spending, taxation, and regulation policies in developed nations are driven by economic rationales for government involvement in economic activity. Both efficiency and distributional rationales are considered. Examined areas of government spending include education, pensions, infrastructure, health care, science, innovation, and social welfare programs. Examined areas of the tax structure include personal income taxes, corporate taxes, consumption taxes, and environmental taxes. Examined areas of regulation may include topics such as alcohol, organ transplants, and gasoline standards. A key aim of the course is to generate an appreciation of how theories of market failure guide public policy.

### 3. Course Objectives

Students should gain a better understanding of economic rationales for government involvement in resource allocation. Student should also gain an understanding of how to produce information that is useful in the design and evaluation of economic policy.

### 4. Course Materials

Problem Sets, Lectures, Slides, Scientific Journal Articles, and News Articles. These are all complementary to one another; none of them is a substitute to another.

### 5. Lectures

Will be posted on LEARN on Mondays. (Asynchronous online lectures; format chosen by the University)

### 6. Problem Sets

Problem sets are distributed through learn.uwaterloo.ca. A group of 2-3 students can submit one set of answers (please put each student's name and student ID in the submission). Talking to students in other groups is permitted. Copying answers of other students or other groups is not permitted.

### 7. Scientific Journal Articles and News Articles

Assigned readings and links will be distributed through learn.uwaterloo.ca.

### 8. Optional Textbook

Gruber, Jonathan, *Public Finance and Public Policy*. 5<sup>th</sup> Edition

A copy of this textbook is placed on reserve at the Dana Porter library.

### 9. Assessment

All students are evaluated based on 6 assignments, 2 take-home midterm exams and a take-home final exam. Final grade is calculated using the following weights:

Assignments	Approx. every other week	35%
Midterm Exam 1	Week 5	15%
Midterm Exam 2	Week 9	15%
Final Exam	TBA	35%

Notes:

- Exams are based on material in Lectures, Problem Sets, Slides, Assigned Sections of the Textbook, and other assigned readings (Scientific Journal Articles and News Articles).
- Exams are cumulative; the questions are based on any material studied in the course so far.
- 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.
- All late work is assigned grade 0.

- If a student misses the midterm exam 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. The midterm exam will not be rescheduled *under any circumstances*.
- 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 <https://uwaterloo.ca/economics/undergraduate/resources-and-policies/deferred-final-exam-policy> for instructions.
- Classroom Protocols
  - Photographic devices are not permitted in class; this is a University regulation.

## 10. University Statements

### Economics Department 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. See the [UWaterloo Academic Integrity](#) webpage and the [Arts Academic Integrity](#) webpage for more information.

**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](#). For typical penalties check [Guidelines for the Assessment of Penalties](#).

**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 Policy 70 - Student Petitions and Grievances](#), Section 4. When in doubt, please be certain to contact the department’s administrative assistant who will provide further assistance.

**Appeals:** A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#).

#### **Accommodation for Students with Disabilities**

**Note for students with disabilities:** [The AccessAbility Services office](#), located on the first floor of the Needles Hall extension (1401), 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.

## **Mental Health Support**

All of us need a support system. The faculty and staff in Arts encourage students to seek out mental health supports if they are needed.

### **On Campus**

- Counselling Services: [counselling.services@uwaterloo.ca](mailto:counselling.services@uwaterloo.ca) / 519-888-4567 ext 32655
- [MATES](#): one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services
- Health Services Emergency service: located across the creek from Student Life Centre

### **Off campus, 24/7**

- [Good2Talk](#): Free confidential help line for post-secondary students. Phone: 1-866-925-5454
- Grand River Hospital: Emergency care for mental health crisis. Phone: 519-749-433 ext. 6880
- [Here 24/7](#): Mental Health and Crisis Service Team. Phone: 1-844-437-3247
- [OK2BME](#): set of support services for lesbian, gay, bisexual, transgender or questioning teens in Waterloo. Phone: 519-884-0000 extension 213

Full details can be found online at the Faculty of ARTS [website](#)

Download [UWaterloo and regional mental health resources \(PDF\)](#)

Download the [WatSafe](#) app to your phone to quickly access mental health support information

## **Territorial Acknowledgement**

We acknowledge that we are living and working on the traditional territory of the Attawandaron (also known as Neutral), Anishinaabeg and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes six miles on each side of the Grand River.