Course Description

This course introduces students to how macroeconomics uses micro-founded theoretical models to study the functions and role of money in the macro-economy, focussing primarily on modern intertemporal general equilibrium models. Using these models, we will explore questions such as why intrinsically worthless pieces of paper can have positive value in equilibrium, why agents hold money over time when other assets provide a higher return, and how money can affect the real economy in the short-run.

Required Text


Supplementary Resources

• Gregor Smith notes http://qed.econ.queensu.ca/pub/faculty/smithgw/econ815A/

**Evaluation**

Each student's grade will be calculated as follows:

**MA Students:**
- Three written assignments 7.5% (2.5% each assignment)
- Midterm exam 30%
- Final exam 62.5%

**PhD Students:**
- Three written assignments 7.5% (2.5% each assignment)
- In-class presentation of paper 10%
- Midterm exam 25%
- Final exam 57.5%

**Assignments**

The tentative assignment due-dates are as follows:

- Assignment 1 due: Tuesday, January 30
- Assignment 2 due: Tuesday, February 27
- Assignment 3 due: Tuesday, April 3

The assignments will typically consist of short-answer questions and mathematical derivations/calculations. While students are permitted to discuss the assignment material with classmates, each student must ensure that their submitted work is their own. Please see the statement on plagiarism below.

Assignments must be submitted either in class on the due date in class (the Economics Department is no longer using the Drop-Box for regular assignment submissions). Late assignments will receive a mark of zero unless a valid reason if provided.

Students should retain some form of copy of each assignment when handing them in.

The assignments *may* be marked for completeness only.
In-class presentation of paper

In the remaining few classes, each PhD student will present an existing paper in the literature to the class. MA students will not present papers, however, all students (both MA and PhD) will be responsible for the material in the papers for the purposes of the final exam.

Midterm exam

The midterm exam will take place during regular class time, tentatively scheduled for Tuesday, March 6. Students who can document a compelling reason for missing the midterm exam will be excused and the weight of the midterm will be automatically added to the final exam. There will be no deferred midterm exam. Necessary documentation includes a doctor’s note or a police report. Please note that the documentation provided by students may be subject to verification.

Final exam

The final exam will take place during the Winter term examination period at a time and place set by the University. The exam will cover content from the entire course. Failure to write the final examination when the student has achieved satisfactory performance during the term will result in a grade of ‘F’ until an appeal to write the deferred final exam has been granted. Please see the Graduate Administrator, Marge Brooks

Course Outline and Schedule

The outline below lists the topics that we will cover, and the related reading. Where there are exclusions to the readings, I will note them during the term in cuLearn.

1. Introduction
   - Course intro and objectives
   - A P.O.W. example monetary economy

2. Empirical evidence
   - Overview of evidence on money, prices and output
     - *Walsh Ch.1
     - Christiano, L.J., M. Eichenbaum and C. Evans, “Monetary Policy Shocks: what have we learned and to what end?”, Handbook of Macroeconomics, 1999

3. Money in an overlapping generations model
   - Independent review: 2-period model economies
     - *Smith notes, Chapter 2, Section (a), (b) and (c)
   - A simple OLG model of money
     - *Champ and Freeman Ch.1
• Blanchard and Fischer Ch.4. Sec. 4.1
• Barter and commodity money
  • Champ and Freeman Ch.2
• Inflation
  • Champ and Freeman Ch.3
  • Blanchard and Fischer Ch.4. Sec. 4.1
• Money and other assets
  • Champ and Freeman Ch.6
  • Blanchard and Fischer Ch.4. Sec. 4.1

4. Money in the utility function
• Aside: Neoclassical growth model and dynamic optimization
  • *Smith notes, Chapter 5 Section (a)
• Aside: The Real Business Cycle Model
  • *Smith notes, Chapter 5 Section (b)
  • Romer Ch.5
• Money in the utility function in dynamic GE
  • Walsh Ch.2

5. Transaction costs
• Transaction cost GE models
  • *Walsh Ch.3

6. Cash-in-advance
• Cash-in-advance in dynamic GE
  • Walsh Ch.3

7. Money and output in the short-run: real rigidities
• Lucas surprise model
  • *Walsh Ch.5
  • Romer Ch.6 Section 6.9
• Limited participation

8. Money and output in the short-run: nominal rigidities
   • Exogenous nominal rigidity
     • Romer Ch.6 Sections 6.1 and 6.2
   • Micro-foundations of nominal rigidities
     • Walsh Ch.6
   • New Keynesian models and monetary policy
     • Walsh Chapter 8

9. Search
   • Search models of money
     • Walsh Ch.3

*Please note that I reserve the right to make modifications to the list of content as the term proceeds. If I make a modification, I will provide advance warning through cuLearn.

**Plagiarism**

Please be aware that plagiarism is a serious offence at Carleton and should be recognized and avoided. For further information on how to do so, please see “Pamphlet on Plagiarism and Paraphrasing” at [www.carleton.ca/economics/courses/writing-preliminaries](http://www.carleton.ca/economics/courses/writing-preliminaries).

**Academic Accommodation**

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

**Pregnancy obligation:**

Please write to the instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the Student Guide.

**Religious obligation:**
Write to the instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the Student Guide.

Academic Accommodations for Students with Disabilities:

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC Web site for the deadline to request accommodations for the formally-scheduled exam (if applicable).

You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at www.carleton.ca/equity/accommodation.