

**McMaster University**  
**Department of Economics**

**Economics 728**

**Macroeconomic Theory II**  
**Fall 2019**

**Instructor:** Zachary Mahone  
Kenneth Taylor Hall, Room 415  
905-525-9140 ext. 23814  
mahonez@mcmaster.ca  
Office hours: Thu 11am-12pm or by appointment  
Homepage: <https://sites.google.com/site/zacharymahone>

**Lecture Hours:** Mon, 9:00-11:50pm  
**Room:** KTH 334

### **Course Description**

This syllabus is a brief overview of Econ 728, Macroeconomic Theory for Public Policy. The first part of the course will build long run models of the macroeconomy to think about measurement, growth and questions of efficiency. Within this framework we will think about the cost of transitions to new policies and a variety of issues related to different forms of taxation, research and development and natural resources. The second part will develop alternative models to think about the recent(ish) rise in inequality and policy implications. We will end by developing a New Keynesian model to address monetary policy and cyclical issues.

### **Course Content**

The course structure below is what I intend to cover during the semester however it is only an approximation; material may be adjusted according to the speed of the class. Each line refers to one week (two lectures) of material. For most of the sections there are associated chapters in Steve Williamson's textbook *Macroeconomics* or Bill Scarth's text *Macroeconomics: The Development of Modern Methods for Policy Analysis*. Another good reference that I will rely on in some places are Pablo Kurlat's Econ 52 Notes (publicly available at <http://web.stanford.edu/~pkurlat/teaching/Econ%2052%20Notes%202018.pdf>). When course material lies outside of these references we will rely on in-class notes.

#### **1. Introduction, Measurement and Optimization**

- Williamson, Chapters 2-3, Kurlat Chapter 9 and in-class notes.

#### **2. A One-Period Macroeconomy**

- Competitive equilibrium and efficiency.
- Williamson, Chapters 4-5

#### **3. Measures of Welfare and a Simplified Growth Model**

- The Solow model, its properties and implications. Policy: taxes (savings rates), transitions and steady states.
- Measures of Welfare

#### **4. Neo-Classical Growth and Fiscal Policy**

- The NGM model - endogenous savings. Policy: tax distorted competitive equilibrium and implications.

#### **5. Endogenous Growth and Monopolistic R&D**

- Growth model with Human Capital (Scarth 11.3). Policy: taxation with R&D
- R&D: 11.3-11.4 in Scarth.

#### **6. Midterm Week**

- Finishing up growth section with some current evidence on trade/taxation policies and innovation.
- Midterm in-class.

#### **7. Fixed Resources, R&D and Policy**

- Growth model with Natural Resources (Scarth 10.5) and Implications of tax policies
- Directed technical change and the environment

#### **8. Inequality: Technical Change and Factor Payments**

- A simple model with skill biased technical change. Policy implications.
- In class notes.

#### **9. Inequality: Market Imperfections and Redistribution**

- Wealth and Income in the data
- In class notes: borrowing constraints, abilities and redistribution.

#### **10. Fluctuations and Stabilization: A New Keynesian Model**

- Real business cycles (how costly are they), monetary neutrality arguments.
- Introducing sticky prices to a Neo Classical Model, the government spending multiplier. Following Kurlat.

#### **11. Fluctuations and Stabilization: Policy in the NK Model**

- Government spending and exploiting the Phillip's curve. Liquidity traps.

#### **12. Last Class - December 4**

- Final Exam

### **Assessment**

Starting in the third week we will have in class presentations by students. These will either be directly related to material we cover or broaden a discussion we otherwise would not have time to cover. Sign up will happen in class.

The midterm exam will take place in-class on Thursday October 25, 2018, and will count for 30% of the final grade. A final exam will take place in-class on Tuesday December 4, 2018, and will also count for 30% of the final grade. Three problem sets will be assigned during the semester, each counting for 15% of the final grade. The remaining 10% is given for the in class presentation.