

## ECON 9003: ADVANCED MACROECONOMICS I (Semester I - 2020/2021) Department of Economics The University of the West Indies - Mona

Lecturer: Nken Moïse Email: nken.moise@uwimona.edu.jm Office: McIntyre Complex E-208 Class: Tuesdays 7-9pm; Thursdays 8-9pm (virtual classes<sup>1</sup>; use the Black Board Corporate (BBC) link in OurVLE to access virtual classroom) Office Hours: TBA, and by Appointment

## Prerequisite:

### **Course Description:**

The objective of this course is to introduce students to modern macroeconomic theory. The course formally analyzes a variety of models and their applications to the study of various economic issues. Topics covered include recursive methods, asset pricing, growth, business cycles and economies with incomplete markets. Students will learn to use MATLAB software in order to numerically solve some of the models introduced in the course.

## Learning Outcomes:

Upon completing this course, the successful student should be able to:

- Determine the economic outcomes when competitive markets exists and be able to compare that with the outcome of an economic planner.
- Define the Equity Premium Puzzle and offer possible solutions to this puzzle.
- Use real business cycle models to explain past economic activity and predict future activities.
- Determine the economic outcome of a dynamic system under different information structures.

## Modes of Delivery:

Online. Three hours of lecture per week.

 $<sup>^1\</sup>mathrm{All}$  lectures are recorded and/or pre-recorded.

### Assessment:

	Weighting	Due Dates					
		Assig <sup>nmt</sup> 1	Assig <sup>nmt</sup> 2	Assig <sup>nmt</sup> 3	Assig <sup>nmt</sup> 4	Assig <sup><math>nmt</math></sup> 5	
Problem sets	15%	TBA	TBA	TBA	TBA	TBA	
Mid-semester Examina- tion	35%			TBA			
Final Examination	50%			TBA			

#### **Resources:**

Required Textbooks:

Lars Ljungqvist and Thomas J. Sargent (2004), Recursive Macroeconomic Theory, 2nd Edition, MIT Press, Cambridge, MA.(LS thereafter)

Nancy L. Stokey and Robert E. Lucas, Jr., with Edward C. Prescott (1989), Recursive Methods in Economic Dynamics, Harvard University Press, Cambridge, MA.(SLwP)

Krueger, Dirk (2013), Macroeconomic Theory, unpublished manuscript.(K)

### **Course Outline:**

#	Course topics	${f Readings^1}$
I	Recursive Methods	LS chapt. 2,3,4; K chapt. 4,5
	Equilibrium with Complete Markets	
Π	<ol> <li>Lucas, R. (1978). "Asset Prices in an Exchange Economy," Econometrica 46, 1429-45.</li> </ol>	LS chapt. 8,13; K chapt. 2
	<ol> <li>Mehra, R. and E. Prescott (1985). "The Equity Premium: A Puzzle," Journal of Monetary Economics 15, 145-161.</li> </ol>	
	<ol> <li>Kocherlakota, N. (1996). "The Equity Premium: It's Still a Puzzle," Journal of Economic Literature 34, 42-71.</li> </ol>	
III	Growth Theory	LS chapt. 12,14; SLwP chapt. 2,9,10; K chapt. 3,9

<sup>&</sup>lt;sup>1</sup>The actual delivery of the content may vary based on class circumstances.

#### Real Business Cycle Models

- 1. Cooley T. and E. Prescott (1995). "Economic Growth and Business Cycles," in T. F. Cooley, editor, *Frontiers of Business Cycle Research*, chapter 1. Princeton University Press: 138.
- 2. Hansen, G. and R. Wright (1992). "The Labor Market in Real Business Cycle Theory," Federal Reserve Bank of Minneapolis Quarterly Review 16 (spring), 2-12.

LS chapt. 12; K chapt. 6; SLwP chapt. 9,10

- 3. Cooley, T. and G. Hansen (1989). "The In ation Tax in a Real Business Cycle Model," The American Economic Review 79(4), 733-748.
- King, R. and S. Rebelo (1999). "Resuscitating Real Business Cycles," Handbook of Macroeconomics, edition 1, volume 1, chapter 14, 927-1007.

#### Uninsured Idiosyncratic Risk and Heterogeneity

- Ríos-Rull, J-V (1995). "Models with Heterogeneous Agents," in T. F. Cooley, editor, *Frontiers of Business Cycle Research*, chapter 4. Princeton University Press.
- Huggett, M (1993). "The Risk-Free Rate in Heterogeneous-Agent Incomplete-Insurance Economies," Journal of Economic Dynamics and Control, 17(5-6), 953-69.
- Aiyagari, S.R. (1994). "Uninsured Idiosyncratic Risk and Aggregate Saving," Quarterly Journal of Economics, 109(3), 659-84.
- Krusell, P. and A.A. Smith Jr. (1998). "Income and Wealth Heterogeneity in the Macroeconomy," Journal of Political Economy, 106(5), 867-96.

#### **Business Cycle Accounting**

- Kehoe, T. and E. Prescott (editors) (2007). "Great Depressions of the Twentieth Century," Federal Reserve Bank of Minneapolis, Minneapolis.
- 2. Amaral, P and J. MacGee (2002). "The Great Depression in Canada and the United States: A Neoclassical Perspective," Review of Economic Dynamics, 5(1), 45-72.
- 3. Chari V.V., P. Kehoe, and E. McGrattan (2007). "Business Cycle Accounting," Econometrica 75, 781- 836.
- Cole, H. and L. Ohanian (1999). "The Great Depression in the United States from a Neoclassical Perspective," Federal Reserve Bank of Minneapolis Quarterly Review, 23, 1-24.

 $\mathbf{VI}$ 

IV

LS chapt. 16,17  $\,$ 

LS chapt. 12; K

chapt. 6; SLwP

chapt. 9,10

3

V

# Specific Course Management Policy

## Problem Sets

Several problem sets related to class material will be distributed during the course. Submitted solutions to the assigned problem sets should look professional. In particular, each problem in an assignment should be written on the same type of paper and use the same font. Math and graphical parts can be written by hand, but they should be legible and neat. Students can work together on the problem sets, but each student must submit his/her own solutions to the problem set using his/her own words. Copying the answers to the problem sets from other students is forbidden.

## Final Exam

The final exam is cumulative and covers all the material learned in class.

## Lecture and Test Rules

- Students should check OurVle regularly for announcements.
- Students should silence all cell phones before entering the lecture hall.
- For all exams: digital dictionaries, PDAs, cell phones and other electronic devices are not allowed. Books, papers, knapsacks and briefcases stay at the front or side of the lecture hall. The only items that you may have with you are pens, pencils, calculator (if allowed), identification and purses. If you do not follow these rules you may be charged with academic dishonesty.