

# Macroeconomics 771

## Course Outline - 2022

### Structure and Team

#### **PART 1: ECONOMIC GROWTH**

18 July – 2 September

#### **Lecturer:**

Gideon du Rand ([gideondurand@sun.ac.za](mailto:gideondurand@sun.ac.za))

#### **PART 2: BUSINESS CYCLES**

12 September – 21 October

#### **Tutor:**

Jeanne Brink ([jeannebrink@sun.ac.za](mailto:jeannebrink@sun.ac.za))

#### **Internal Moderator:**

Willem Boshoff

#### **IMPORTANT DATES:**

Essay Due: 23:59 on 22 August 2022 (5 weeks from start of term)

Test: 19 September 2022

Exam: October/November 2022 (to be announced by Carina Smit)

### Context and Outcomes

Modern macroeconomics is an exciting field which is currently changing very rapidly: the international financial crisis starting in 2008 has highlighted many practical and theoretical problems and questioned the received macroeconomic wisdom in several respects. The covid pandemic has elicited fiscal responses unprecedented in recent history, and wreaked havoc on the global economy. In this course we will explore the tools of mainstream macroeconomics and consider their strengths and weaknesses in providing analyses of these matters.

This course considers the principal approaches used in modern macroeconomics to investigate business cycles and the long-term performance of market economies. In the first part of the course, we study some of the main models of modern macroeconomics (Neoclassical, Ramsey-Cass-Koopmans and Overlapping-Generations models) in the context of growth theory. We also use the Ramsey-Cass-Koopmans and Overlapping-Generations models in application lectures, where we apply these models to topical questions such as how governments finance their spending.

In the second part of the course, we study the business cycle from the perspective of models with nominal rigidities, working towards the New Keynesian Phillips curve and Dynamic Stochastic General Equilibrium models which forms the core of a large number of modern macroeconomic policy models. This is followed by a session on models of investment and consumption (asset pricing), and finally one on credit cycles and financial crises.

By the end of the course, the student will have the skillset to understand and critique a substantial body of modern macroeconomics research, develop the writing ability necessary to communicate macroeconomic results and be prepared for further advanced courses in dynamic macroeconomics.

## Evaluation

The Final Course Mark will be calculated as follows:

Component	Weight	Dates
Problem sets	10%	Tutorial Sessions (see below)
Essay	30%	22 August 2022
Assessment on Part 1	30%	19 September 2022 (mid-semester test)
Assessment on Part 2	30%	October/November 2022 (examination)

To pass the course a student must:

- Submit the course essay
- Obtain a Final Course Mark of at least 50%
- Obtain an Assessment mark of at least 40% for *each* part of the course individually

## Assessments

The following departmental rules govern the tests and exams in this course:

- The mid-semester test covers Part 1 of the course.
  - It is **compulsory**. If the test is missed due to illness, a *valid*<sup>1</sup> medical certificate must be sent to the convenor within 48 hours of the assessment. Absence without a valid medical certificate implies an immediate incomplete for the course and it will have to be repeated (if the student qualifies – see general honours handout).
  - Students who miss the test with valid medical excuse **or** obtain less than 40% in the test are *required* to write the sick test on Part 1 during the exam period (on the *same* day as the exam on Part 2). Students who obtain a test mark between 40% and 49% may also take the sick test on Part 1 as a supplementary opportunity.
    - If taken as a supplementary opportunity, the assessment mark for Part 1 is capped at 50%
  - The sick test on Part 1 is the **final** opportunity to pass part 1.
- If the exam mark on Part 2 is below 40%, the student fails the course.
- If the test (or sick test) mark on Part 1 **and** the exam mark on Part 2 is above 40% but the final course mark is below 50%, there will be a supplementary exam on **only** Part 2.
  - The student must achieve at least 40% in the supplementary exam and a final course mark of at least 50% to pass. The final course mark of students that write the supplementary exam on Part 2 is capped at 50%.
- If a student obtained at least 40% in the mid-semester test and misses the exam on Part 2 due to illness, the student must submit a valid (see footnote 1) medical certificate within 48 hours of the exam to Carina Smit ([carina@sun.ac.za](mailto:carina@sun.ac.za)) and will then have access to the supplementary exam on part 2 as a sick exam without cap.
- The sick test (on Part 1) and the supplementary exam (on Part 2) are the final opportunities to pass the course.
- Note: If a student submits a valid medical certificate for an assessment opportunity, **no** assessments on that day may be taken (or will be accepted).

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<sup>1</sup> Medical certificates must meet specific the following requirements to be accepted, namely:

Name of the patient (student); Date and time of medical examination; An indication that the certificate has been issued after a personal observation (this excludes telephonic consultation or communication) of the student by a suitably registered medical practitioner; Confirmation that the student will not be able to or was not able to attend class or take the class test(s) or carry out the class work, due to illness, and any other information which, in the judgement of the practitioner would be required or relevant. Please refer to the University Calendar, Part 1 (pages 108-109), for further information (<http://www.sun.ac.za/english/Documents/Yearbooks/Current/2021-Calendar-Part-1.pdf>)

### Essay:

Each student must submit an essay on one of the topics provided.

- All aspects of the essay will be administered via SUNLearn.
- A limited number of students will be allowed to register each topic.
- The topics will be released on 20 July 2022 and registration for a topic will open at 13:00 on Friday, 22 July 2022. While there is space on a topic, you may switch to it. Once a topic is full, I will only consider a change to that topic if you can find a fellow student to swap with.
- There is a maximum word limit of 2000 on the essay (strictly enforced).
- Writing an essay on a topic other than that for which you registered, exceeding the word limit or handing the essay in late will result in penalties.

### Problem Sets:

Several problem sets will be assigned for most weeks during the course. These serve as tools to cement intuition and as continuous preparation for the test and exam. All tutorial material is examinable in the formal assessments. Students are expected to submit a solution to the tutor (electronically) before the tutorial session where the solutions will be discussed. Three randomly selected problem sets will be graded for the final course mark component.

### Reading material

David Romer's *Advanced Macroeconomics 5th edition* (McGraw-Hill, 2019) is the central text for this course. Each topic is supplemented with a variety of readings from academic journals and electronic sources. Articles are clearly grouped into those that are compulsory and those that are optional, but recommended. Note: Students will be able to access some of the prescribed articles via the macroeconomics page on SUNLearn. It is also recommended that students follow the financial press (Financial Times, the Economist or the Business Day).

### Lecture Schedule (subject to change)

#### Part 1: Economic Growth

##### Session 1

19 July 2022

##### Required:

Caballero, R. J. 2010. Macroeconomics after the crisis: Time to deal with the pretense-of- knowledge. *Journal of Economic Perspectives* 24(4): 85-102.

##### Introduction to modern macroeconomics

Romer, P. 2016. The trouble with macroeconomics. Delivered as the Commons Memorial Lecture of the Omicron Delta Epsilon Society. Forthcoming in *The American Economist*. <https://paulromer.net/wp-content/uploads/2016/09/WP-Trouble.pdf>

Reis, R. 2018. Is something really wrong with macroeconomics? *Oxford Review of Economic Policy*, Volume 34, Issue 1-2, 5 January 2018, Pages 132–155, <https://doi.org/10.1093/oxrep/grx053>

##### Suggested:

Uhlig, H. 2010. Economics and reality. Cambridge, MA., *NBER Working Paper* 16416.

<b>Session 2</b> 26 July 2022  <b>Economic growth, introduction and the Neo-classical framework</b>	<b>Required:</b> Romer: chapter 1  Rogers, M. 2003. A survey of Economic Growth. <i>The Economic Record</i> , Vol. 79, No. 244, March, 2003, 112–135.  Gordon, R. 2016. Perspectives on The Rise and Fall of American Growth. <i>American Economic Review: Papers &amp; Proceedings</i> 2016, 106(5): 72–76.  <b>Suggested:</b> Barro, R.J. and Sala-i-Martin, X., 2004. <i>Economic Growth</i> . Chapter 12. Empirical analysis of a cross section of countries. Cambridge, MA., MIT Press  Du Plessis, S. A. and B. W. Smit. 2007. South Africa’s growth revival after 1994, <i>Journal of African Economies</i> 16 (5), pp. 668-704  Macro Musings 75: Larry Summers on Secular Stagnation, Fiscal Policy, and Fed Policy <a href="https://www.mercatus.org/%5Bnode%3A%5D/podcasts/09182017/macro-musings-75-larry-summers-secular-stagnation-fiscal-policy-and-fed">https://www.mercatus.org/%5Bnode%3A%5D/podcasts/09182017/macro-musings-75-larry-summers-secular-stagnation-fiscal-policy-and-fed</a>
<b>Session 3</b> 2 August 2022  <b>Adding micro-foundations to growth</b>	<b>Required:</b> Romer: chapter 2, sections 2.1-2.6
<b>Session 4</b> 16 Aug 2022  <b>The government in growth Models</b>	<b>Required:</b> Romer: chapter 2, section 2.7, chapter 11, sections 11.2-11.3  Barro, R.J., 1989. The Ricardian Approach to Budget Deficits, <i>Journal of Economic Perspectives</i> , (vol. 3, Spring), pp. 37-54  Tanzi, V. 2009. The Economic Role of the State Before and After the Current Crisis Cape Town, Paper presented at the plenary session of the 65th Congress of the International Institute of Public finance, Cape Town, August 13, 2009.
<b>Session 5</b> 23 August 2022  <b>Overlapping generations Models</b>	<b>Required:</b> Romer: chapter 2, sections 2.8-2.12  <b>Suggested:</b> Econtalk: William Easterly on Benevolent Autocrats and Growth, May 30, 2011.

<b>Session 6</b> 30 August 2022  <b>Application to social security</b>	<b>Required:</b> Champ, B, Scott, F and Haslag, J. 2016. Modeling Monetary Economies, Chapter 15 (plus appendix on social security).  Feldstein, M., 2005. Rethinking Social Insurance, <i>American Economic Review</i> , 95(1), March, pp. 1-24  Cecchetti, S, Mohanty, M and Zampolli, F. 2010. The future of public debt: prospects and implications. <i>BIS Working Paper</i> No. 300, March 2010.  <b>Suggested:</b> Ehrlich, I and Kim, J. 2005. Social Security, Demographic Trends, and Economic Growth: Theory and Evidence from the International Experience. <i>NBER Working Paper Series</i> , No 11121, February 2005.  Econtalk: Joshua Rauh on Public Pensions, 5 November 2012.  Macro Musings: 108 - Sam Hammond on Welfare Reform and Social Insurance <a href="https://soundcloud.com/macro-musings/samhammond">https://soundcloud.com/macro-musings/samhammond</a>  Krugman, P. 2010. Attacking Social Security. <i>The New York Times</i> . Available online at: <a href="http://www.nytimes.com/2010/08/16/opinion/16krugman.html?_r=0">http://www.nytimes.com/2010/08/16/opinion/16krugman.html?_r=0</a>
<b>Part 2: Business Cycles</b>	
<b>Session 7</b> 13 September 2022  <b>Real Business Cycle Theory</b>	<b>Required:</b> Romer Chapter 5  Kehoe, P.J., Midrigan, V. and Pastorino, E., 2018. Evolution of modern business cycle models: Accounting for the great recession. <i>Journal of Economic Perspectives</i> , 32(3), pp.141-66.
<b>Session 8</b> 20 September 2022  <b>Nominal Rigidities &amp; Price Dynamics</b>	<b>Required:</b> Romer Chapter 6  Nakamura, E. and Steinsson, J., 2013. Price rigidity: Microeconomic evidence and macroeconomic implications. <i>Annu. Rev. Econ.</i> , 5(1), pp.133-163.  <b>Suggested:</b> Gorodnichenko, Y. and Weber, M., 2016. Are sticky prices costly? Evidence from the stock market. <i>American Economic Review</i> , 106(1), pp.165-99
<b>Session 9</b> 27 September 2022  <b>The canonical New Keynesian DSGE model</b>	<b>Required:</b> Romer Chapter 7
<b>Session 10</b> 4 October 2022  <b>Models of Investment and Consumption (Asset Pricing)</b>	<b>Required:</b> Romer Chapter 8 and 9

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<b>Session 11</b>	<b>Required:</b>
11 October 2022	Romer, Epilogue
<b>Credit Cycles and Financial Crises</b>	Kiyotaki and Moore (1997) "Credit Cycles" <i>Journal of Political Economics</i> 105(2)

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