

## **Advanced Macroeconomics**

Academic Year: **2017/2018**

Term: **3<sup>rd</sup> Quarter**

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### Biography:

Catarina Reis holds a PhD in Economics from the Massachusetts Institute of Technology, USA, and BSc in Economics from the Católica-Lisbon SBE. She is also the Academic Director of the MSc in Economics at Católica-Lisbon.

Her research focuses on macroeconomic models of optimal taxation, with a special focus on the taxation of capital income. Her research has been published in international journals such as *Macroeconomic Dynamics* and *Journal of Economic Theory*.

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### Course overview and objectives:

This course offers an introduction to neoclassical macroeconomics in a closed economy. The course is intended for master's students who wish to develop a solid background in this area. This course is mandatory for Economics MSc students at Católica Lisbon. At the end of the course, students should be able to understand the behaviour of the aggregate economy in the Neoclassical Model and simulate models numerically using excel.

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### Course Content:

- L1: Introduction – Modeling the households' saving decisions
- L2: Competitive equilibrium in the neoclassical model
- L3: Problem Set 1
- L4: Steady state and phase diagram
- L5: Planner's problem
- L6: Quiz 1. Problem Set 2
- L8: Government spending and shocks
- L7: Planner's problem with endogenous labor supply
- L9: Problem Set 3
- L10: Taxes and government debt. Ricardian equivalence.
- L11: Externalities in the neoclassical model
- L12: Quiz 2. Problem Set 4
- L13: Solving the neoclassical model recursively
- L14: Uncertainty and real business cycles
- L15: Problem Set 5
- L16: Optimal taxation
- L17: Optimal public debt management
- L18: Problem Set 6

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### Required background:

If you are a Católica Lisbon student, you need to have taken Advanced Microeconomics. If you are an exchange student, you need an economics background including an advanced course in microeconomics.

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### Grading:

80% final exam, 20% quizzes.

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### Bibliography:

There isn't one book that fits the class exactly. Useful references are:

Romer, Advanced Macroeconomics, 3<sup>rd</sup> Edition, McGraw Hill, 2006

Ljungqvist and Sargent, Recursive Macroeconomic Theory, 2<sup>nd</sup> edition, MIT press, 2004

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### Code of conduct and ethics:

Católica Lisbon School of Business and Economics is a community of individuals with diverse backgrounds and interests who share certain fundamental goals. A crucial element to achieve these goals is the creation and maintenance of an atmosphere contributing to learning and personal growth for everyone in the community. The success of CATÓLICA-LISBON in attaining its goals and in maintaining its reputation of academic excellence depends on the willingness of its members, both collectively and individually, to meet their responsibilities.

Along with all the other members of our community, students are expected to follow professional standards and CATÓLICA-LISBON standards of Academic Integrity. Some details should be mentioned here: Please arrive on time for class with uninterrupted attendance for the duration of the class. Signing attendance sheet for anyone else in the class constitutes fraud and a violation of the CLSBE code of conduct. Use of computers and other electronic devices during the class is not allowed, unless expressly requested by the instructor of the course. Students who persistently act in a disruptive and disrespectful manner during the class session may be invited to leave.

Students are expected to behave at all times according to the fundamental principles of academic integrity, including honesty, trust, fairness, respect, and responsibility. In particular,

- a) In **individual graded assignments** of any type, students may not collaborate with others or use any materials without explicit permission from the instructor of the course;
- b) In **group assignments and reports**, all students listed as authors should have performed a substantial amount of work for that assignment;
- c) It is dishonest to fabricate or falsify data in experiments, surveys, papers, reports or other circumstances; fabricate source material in a bibliography or "works cited" list; or provide false information in other documents in connection with academic efforts;
- d) **Plagiarizing**, i.e. "to steal and pass off the ideas or words of another as one's own and or to use another's production without crediting the source" (Merriam-Webster Dictionary) is an Academic Integrity breach. It can be avoided by using proper methods of documentation and acknowledgement. Visit this guide for additional resources on how to avoid plagiarism in your written submissions <http://en.writecheck.com/plagiarism-guide>

- e) In **exams** students must not receive or provide any unauthorized assistance. During an examination, students may use only material and items authorized by the faculty. Use of smartwatches or other communication devices is not permitted during the exam.

Academic integrity breaches will be dealt with in accordance with the school's code of Academic Integrity:  
<https://www.clsbe.lisboa.ucp.pt/system/files/assets/files/academicintegritycode.pdf>

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