

Applied Computational Economics

Quantitative Macro Section

The University of Nottingham

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Instructor

- Adam Hal Spencer (Assistant Professor of Economics).
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Class Structure

My part of the module will have 5 class meetings. During that period, we'll cover 3 different topics, where each is accompanied by a lab session. We'll alternate with a lecture-lab-lecture-lab pattern throughout. The topics we'll cover are

0. Introduction to numerical solutions and coding.¹
1. Recursive methods and solving representative agent partial equilibrium models.
2. Solving representative agent models in general equilibrium (GE).
3. Solving heterogeneous agent GE models with idiosyncratic uncertainty.

You should bring your laptop to all of the meetings with the required software installed.

Software

We'll use Matlab in this class. You can download an academic version of it from the University software library: https://workspace.nottingham.ac.uk/login.action?os_destination=%2Fspaces%2Fviewspace.action%3Fkey%3DSoftware&permissionViolation=true.

Assessment

The sole assessment task will be to replicate a paper that utilises the techniques we've studied throughout the class. More details on this will be released towards the end of the class.

¹This material will be for self-study before the class begins out of the interest of time.

Readings

The class is self-contained to the lecture notes and labs, but I've got a list of additional readings on the course page. You don't have to go over all these, (as indeed the list is extremely long). But they're there if you want more details on a given topic (some are textbook references) or if you want to see some interesting applications (academic papers).