

Exercise class 12

Introduction to Programming
and Numerical Analysis

Class 3

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Model project

Exam 2022

Now what...?

Feedback on model project

You made some very interesting model projects - good job!

For many of you, I've suggested possible extensions - those are just if you're interested and **not necessary** to pass the exam unless I've explicitly stated otherwise.

Don't forget to write text in markdown, explaining your **method** and your **results**.

Be careful not to rely too much on sympy - remember, **you are tested primarily on your knowledge of numerical methods!**

If you choose to extend a model from this course, be very explicit in what your extension consists of and when you are "just" re-using code.

Exam 2022

Earlier exams have had three questions with subquestions, each from one of the different parts of the course:

1. **Data-questions** may provide you with a dataset to be cleaned, and asks you to produce certain plots and make certain analyses. Or you are presented with some econometric estimator and asked to implement it.
2. **Algorithm-questions** describe an algorithm in detail, often with pseudo-code, and asks you to implement it.
3. **Model-questions** present you with an economic model (usually dynamic) to solve and simulate.

Tips for preparing

Make sure you have **perfected your projects** to the best of your ability. Good projects are insurance against a potentially bad exam!

Read through the lecture notebooks and problem sets and make sure you **understand the code**. Make note of each time a model is solved - maybe that may be relevant for the exam.

Look through and **solve previous exam sets** (all available in the course github). Remember that the solution guides are very thorough - less is needed to pass the exam.

Tips for the exam

Read through all the questions and start by solving those that you feel **most confident** about.

Keep calm. If you get frustrated, take a short break, or move on to a different part of the exam.

If your code is not running correctly, and you don't know how to fix it, explain what you have done and how you think the problem could be solved - and **move on**.

Re-use code from lectures and problem sets whenever possible - and be explicit when doing so.

If you are in a group, it can be a good idea to split up the problems and **solve individually and then proofread** each others code afterwards.

Now what...?

You are now equipped to deal with a massive class of economic problems.

You have a powerful tool to help you in your further studies - ie. to check your calculations, perform data analysis or make beautiful visualizations.

And you can confidently add "Proficient Python user" to your resumé!

If you are interested in computational economics, I can recommend the following Master courses:

- Advanced Microeconometrics
- Dynamic Programming
- Household Behavior over the Life Cycle
- Advanced Macroeconomics: Heterogenous Agent Models

BEST OF LUCK WITH THE EXAM