ECON 202A: Macroeconomics (Second Half)

Fall, 2025

Section Syllabus

GSI: Kiyea Jin (She/Her)

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Office Hours: Friday 12pm-2pm, Evans 542

Time and Location

• Section 101: Wednesday 8am-10am, Social Sciences Building 185

• Section 102: Friday 2pm-4pm, Latimer 102

Attendance

Attendance is encouraged but not mandatory. Students enrolled in one section are welcome to attend the other if space permits. All section notes will be posted on GitHub prior to each class, so you can follow along even if you are unable to attend in person.

Section Overview

In the sections, we will discuss *numerical solutions using a finite-difference method for continuous-time heterogeneous agent models*. The following are useful references:

- 1. Benjamin Moll's website
- 2. Online Appendix for Achdou, Han, Lasry, Lions, and Moll (2022)
- 3. LeVeque, 2007, "Finite Difference Methods for Ordinary and Partial Differential Equations: Steady-State and Time-dependent Problems."
- 4. Candler, 1999, "Finite Difference Methods for Continuous Time Dynamic Programming."

Schedule (Subject to Change)

October 22, 24: Discrete and Continuous-Time Dynamics & Introduction to Finite Difference Method

- October 29, 31: Neoclassical Growth Model
- November 5, 7: Huggett Model Partial Equilibrium
- November 12, 14: Huggett Model General Equilibrium
- November 19, 21: Coding Huggett Model
- November 26, 28: No Section: Thanksgiving Break
- December 3, 5: TBD

Communication and Office Hours

Feel free to email me with any questions. Please include [ECON 202A] at the beginning of the subject line. Please allow up to two business days for a response.

Office hours are held on Fridays from 12pm to 2pm in Evans 542. If this time doesn't work for you, please email me to arrange an alternative meeting.

Problem Sets

Problem sets will be distributed weekly and are due every Monday by 11:59pm. Submissions should be made via Gradescope. Late submissions will not be accepted.

For coding problems, please do not upload program files directly. Instead, submit your code either as a text document (e.g., .txt, LaTeX, Word) or as a PDF. If you are using LaTeX, I recommend the listings package for formatting your code.

All in-class coding demonstrations will be conducted using MATLAB, and some assignments may require you to adapt pre-written MATLAB code that will not be available in other languages. Berkeley offers free access to MATLAB through a campus license.¹ While you are welcome to use other programming languages, I will only be able to provide support for MATLAB.

Disability-Related Accommodations

If you are registered with the Disabled Students' Program (DSP) and need disability-related accommodations, please let me know as soon as possible so I can make appropriate arrangements. If you need accommodations but are not registered with DSP, please contact DSP by phone at (510) 642-0518 (voice), (510) 642-6376 (TTY), or e-mail dsp@berkelely.edu. For more information, please visit the DSP website at https://dsp.berkeley.edu/.

¹Please refer to https://software.berkeley.edu/matlab.

UC Berkeley Honor Code

The student community at UC Berkeley has adopted the following Honor Code: "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." The hope and expectation is that you will adhere to this code. For more information about the UC Berkeley Honor Code, please go to https://teaching.berkeley.edu/berkeley-honor-code.

Academic Integrity

University policies on academic integrity will be strictly enforced. You may also wish to read the Berkeley Campus Code of Student Conduct available at https://studentaffairs.berkeley.edu/studentaffairs-policies/. If you have any questions or concerns, please do not hesitate to speak with me.

References

- Achdou, Y., J. Han, J.-M. Lasry, P.-L. Lions, and B. Moll (2022). Income and wealth distribution in macroeconomics: A continuous-time approach. *The review of economic studies 89*(1), 45–86.
- Candler, G. V. (1999). Finite-difference methods for dynamic programming problems. *Computational Methods for the Study of Dynamic Economies*.
- LeVeque, R. J. (2007). Finite Difference Methods for Ordinary and Partial Differential Equations: Steady-State and Time-dependent Problems. Philadelphia, PA: Society for Industrial and Applied Mathematics.