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CCA

# Life Cycle Models

Instructor: Francesca Parodi

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Contact information:

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Office Hours: by appointment

Class times: TBD

Web: Course materials will be located at Google Classroom. Log-in using your Collegio Carlo Alberto email address.

## **Course description:**

This course provides an introduction to dynamic programming, computational methods, and structural estimation of life cycle models. The main goals of the course are to introduce students to standard tools used to solve dynamic optimization problems, demonstrate practically how these tools are used, focus on methods that can be extended to more complex setups.

## **Grades:**

Course grade will be based on a final exam.

## **Problem sets:**

Lectures will be accompanied by problem sets. The problem sets will not be handed in. You are encouraged to work on the problems sets in groups.

**Textbook:**

- Adda, J. & Cooper, R., “Dynamic Economics”, MIT Press, Cambridge, 2003.

**List of topics:**

- Introduction to dynamic programming
- Life cycle income processes
- Stochastic optimization
- Infinite horizon problem
- Estimation Methods
- Applications and Extensions