### 経済動学 (FH27041)



ターンブル スティーヴェン ジョン

October 2, 2020

### **Economic Dynamics (FH27041)**

# Introduction

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### Course objectives

- 1. Understand the role of mathematical modeling in economics
- 2. Introduce important dynamic models in economics
- 3. Develop a research topic for graduation research
- 4. Become more comfortable in listening to native speakers of other languages (especially English)

What this course will not do:

- 1. Explain time series or panel data analysis
- 2. Discuss economic forecasting

#### Lecture structure

- 1. On-demand video lectures (60-75 minutes), 1 or 2 per week
- 2. Alternate weeks: Q&A (45-60 minutes)

#### Lecture schedule

No.	Date	Topics
1	Oct 2	Modeling COVID: the how and why of math
2	Oct 9	Introduction to dynamics in economics
3	Oct 16	Differential and difference equations, and simulation
4	Oct 23	Solow's economic growth model
5	Oct 30	Exhaustible resources (oil)
6	Nov 13	Sustainable resources (fish)
7	Nov 20	Stochastic dynamics in finance
8	Dec 4	Chaotic dynamics
9	Dec 11	Dynamic games
10	Dec 18	Economics of network industries

# Grading

40%	Research proposal: Identify a question in social science that		
	involves dynamics in some important way. Explain the relation		
	of dynamics to the question. Propose to study the issue using		
	methods of economic dynamics.		
20%	Presentation: Present your proposal in a recorded, short speech		
	of 2–3 minutes.		
20%	Homework: Problem solving. (See test bank on old website.)		
20%	Class participation: Ask questions about lecture content, sum-		
	marize important points from lecture in <i>short speeches</i> .		

# Contacts

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