PPOL6120: MPM Capstone
Syllabus

Standard economics, arguably the theoretical cornerstone of public policy, usually starts with the assumption of *rational agency*. Agents are assumed to maximize their individual interests, their preferences are transitive, their discount rates are consistent across time, and they make decisions using cost-benefit calculations. But a growing body of evidence suggests that human behaviors in a variety of situations not only deviate from these assumptions, but they do so in systematic and predictable ways. These deviations may be due to behavioral biases (such as our asymmetric responses to gains and losses, our subjective weighting of probabilities, etc.), cognitive limitations (such as inattention or inertia), and social norms and influences. Policy analysis based only on the standard assumptions of neoclassical economics may therefore lead to the wrong conclusions and/or overly simplistic policy recommendations.

Standard economics is also based on the assumption that *markets tend towards equilibrium*, that individually optimal actions lead to collectively optimal outcomes, that our expectations about the future are (on average) rational, and that the future can be modelled based on calculable risks. These assumptions imply that the economy is a mechanical system that can be precisely engineered/controlled. But the reality of boom-bust cycles and inherent uncertainty in many domains suggest that we need a different way of studying economics and public policy.

The course will argue that the economy/society is a **complex adaptive system** made up of many interconnected agents (households and firms) which are interacting with, and adapting to, each other and the environment. This also means that the economy cannot be easily reduced to a set of stable, predictable causal relationships that standard economics assumes.

This course examines the various ways in which the market economy departs from the assumptions of neoclassical economics. It draws on economic traditions *other than* neoclassical economics to analyze complex systems (of which the market economy is an example) and highlights the policy implications and applications of such an understanding. MPM students have already been taught the key concepts in behavioral economics; how people's bounded rationality, bounded willpower, and bounded self-interest can affect their choices and behaviors; how behavioral considerations can improve policy design; and how public policy should incorporate the insights of behavioral economics.

In the MPM capstone, we will therefore study other aspects of the *economy as a complex adaptive system*. As a complex adaptive system, the economy is characterized (often) by **disequilibrium**, **interconnectedness** (or networks), **emergence**, and **evolution**. To illustrate and analyze these concepts, we look at industrial and economic development, inequality, the pandemic, political polarization, and the financial system through the lens of complexity.

Six Classroom Sessions (Rm 2504, Lift 25-26)
Seminar 1: Wed 18 Jun, 6:30 – 9:20 pm
Seminar 2: Sat 21 Jun, 10:00 am – 12:50 pm
Seminar 3: Wed 25 Jun, 6:30 – 9:20 pm
Seminar 4: Sat 28 Jun 10:00 am – 12:50 pm
Seminar 5: Tue 1 Jul 9:30 am – 12:20 pm (Zoom)
Seminar 6: Thu 3 Jul 6:30 – 9:20 pm

Seven student consultation & presentation sessions (online)
Session 7: Mon 14 Jul, 9:30 am – 11:00 am
Session 8: Tue 15 Jul, 9:30 am – 11:00 am
Session 9: Wed 16 Jul, 9:30 am – 11:00 am
Session 10: Thu 17 Jul, 9:30 am – 11:00 am
Session 11: Fri 18 Jul, 9:30 am – 11:00 am
Session 12: Mon 21 Jul, 9:30 am – 11:00 am
Session 13: Tue 22 Jul, 9:30 am – 11:00 am

Assessment
1. Class attendance and participation: 20%
2. Presentation: 25%
3. Final paper (first draft): 26%
4. Final paper (second draft): 29%

(The final paper is a 2,000-word policy brief on a complex policy issue/problem that you'd write in pairs. The paper would apply behavioral insights and complexity thinking to a policy issue of the students' choice. It should *articulate and explain* the policy issue/problem, focusing on why it is a complex one that traditional/standard economic approaches cannot fully explain, then draw on some of the key ideas taught in this course to *analyze* the issue/problem, and *propose* one or two high-level approaches for policymakers to address the issue.)

Readings

Seminar 1 (18 Jun)	Introduction to Complexity Economics	1. The Economist, "It's complicated: How economists are grappling with the unpredictable outcomes of simple interactions", 6 April 2019. (https://www.economist.com/finance-and-economics/2019/04/04/simple-interactions-can-have-unpredictable-consequences) 2. When Organizational Rules and Routines become Dysfunctional (case study) 3. Eric Beinhocker, *The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics*, 2006, Ch 1-2

Seminar 2 (21 Jun)	Key Characteristics of Complex Adaptive Systems, Part I	1. Eric Beinhocker, *The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics*, 2006, Ch 3-5
Seminar 3 (25 Jun)	Key Characteristics of Complex Adaptive Systems, Part II	1. Beinhocker, Ch 7-8
Seminar 4 (28 Jun)	Key Characteristics of Complex Adaptive Systems III	1. Beinhocker, Ch 9 2. Mariana Mazzucato, 2013. "The Entrepreneurial State: Debunking Public vs Private Sector Myths", Ch 2-3 3. Yasheng Huang, 2024. "The Rise and Fall of the EAST", Ch 7-8
Seminar 5 (1 Jul)	Economic development through the lens of complexity	1. Ricardo Hausmann, "In Search of Convergence", Project Syndicate, 20 Aug 2014 2. Hausmann, Hidalgo, et al., "The Atlas of Economic Complexity: Mapping Paths to Prosperity", 2014 (Executive Summary)
Seminar 6 (3 Jul)	Identity politics and political polarization through the lens of complexity	1. Elizabeth Kolbert, "Why Facts Don't Change our Minds", *New Yorker*, 27 February 2017. (https://www.newyorker.com/magazine/2017/02/27/why-facts-dont-change-our-minds) 2. Mikko Manner and John Gowdy, 2010. "The evolution of social and moral behaviour: Evolutionary insights for public policy", *Ecological Economics*, 69: 753-761.
Sem 7 (self-study)	Finance through the lens of complexity	1. Andrew Haldane, Rethinking the Financial Network, 2009 2. Andrew Lo, "Adaptive Markets: Financial Evolution at the Speed of Thought", Ch 2-4, 6