

POLICYMAKING IN A COMPLEX WORLD
POGO 750 DL1
CRN 78799

Semester: Fall 2025

Meeting Time: Monday's 4:30 PM – 7:00 PM, Online

DRAFT SYLLABUS APRIL 17, 2025

Contact Information

Professor: Hilton L. Root

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- **Office Hours:** Thursdays, 5:00 PM – 7:00 PM (or by appointment)
- [Hilton Root's bio](#); hiltonroot@gmu.edu

Course Overview

Contemporary policy challenges—ranging from global financial crises to climate change—often involve large, interconnected systems. Traditional policy approaches that assume linearity and top-down control can fail to address the “wicked” nature of these problems. This course introduces Complexity Science as a powerful lens through which to analyze, model, and address complex policy issues.

By examining real-world cases and connecting core concepts (e.g., emergence, networks, and adaptability) with methods (e.g., agent-based modeling, network analysis) and policy applications (e.g., global financial governance, urban planning, governance reform), students will learn how complexity frameworks illuminate hidden feedbacks and interdependencies. Ultimately, the course aims to equip future policymakers with adaptive strategies that can handle change that is slow or gradual, resulting in economic development or a shift in norms, values and institutions. But, also at other times when change is abrupt, and it impacts many people, such as a financial crisis.

Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1. Explain Key Complexity Concepts**

Describe how emergence, path dependence, feedback loops, and adaptivity shape global political, social, and economic systems.

2. **Apply Complexity Methods to Policy**

Use analytical tools (such as agent-based models, network analysis, and case-based frameworks) to diagnose complex policy problems.

3. **Develop Adaptive Policy Strategies**

Propose dynamic and flexible policy interventions suited to complex, interconnected systems, including finance, governance, and economic development.

4. **Analyze Global Interdependencies**

Demonstrate an understanding of how global economic and financial networks create opportunities and risks, and how governance mechanisms can address them.

5. **Critically Evaluate State and Market Roles**

Contrast traditional (e.g., neoclassical) and emerging (e.g., evolutionary, complexity-based) perspectives on the balance between state intervention and market processes.

6. **Communicate Complex Insights**

Present clear, persuasive arguments—both orally and in writing—on how complexity science can inform public policy design and implementation.

Course Format and Approach

- **Lectures & Discussion:** Each class will begin with a short lecture to frame the topic, followed by an in-depth discussion or activity.
- **Guest Speakers:** Experts from research organizations and practice will share real-world applications of complexity science.
- **Student Presentations:** Students will lead discussions on select readings or relevant case studies, practicing the communication of complex ideas to peers.
- **Project-Based Learning:** A major component of the course is the final project (paper or agent-based model). Peer assessments will encourage collaboration and reflection.

Course Requirements & Grading

1. **Class Participation & Presentation (20%)**

- Active participation in weekly discussions.
- One in-class presentation on a topic or reading from the syllabus (schedule will be determined in Week 1).

2. **Midterm Take-Home Essay (20%)**

- Students will receive a set of questions via email.
- Choose one question to address in a 1,000-word essay.
- Essays should apply course concepts to a specific policy issue.

3. **Final Project (60%)**

- **Option A:** A 3,500-word term paper exploring how complexity applies to a real-world policy challenge (e.g., health, environment, cyberwarfare, governance).
 - Illustrate how evolutionary or complexity-based theories can yield insights beyond conventional analytical tools.
 - Propose experiments or strategies for policy adaptation.
- **Option B:** An agent-based or simulation model that investigates a particular property of a complex social environment.
 - Demonstrate how this computational approach can generate insights for global policy questions.
- **Peer Assessment:** Final projects will be shared in class, and peers will offer constructive feedback.

Required Texts

1. Arthur, W. Brian (2009). *The Nature of Technology: What It Is and How It Evolves*. Free Press.
2. Barabási, A.L. (2003). *Linked: How Everything Is Connected to Everything Else and What It Means*.
3. Hadfield, G.K. (2017). *Rules For a Flat World: Why Humans Invented Law and How to Reinvent It for a Complex Global Economy*. Oxford University Press.
4. Richerson, P.J., & Boyd, R. (2005). *Not by Genes Alone: How Culture Transformed Human Evolution*. University of Chicago Press. (Chapters 1–4)
5. Roos, Michael (2024). *Principles of Complexity Economics: Concepts, Methods and Applications*. Springer.
6. Root, Hilton L. (2020). *Network Origins of the Global Economy: East Vs. West in a Complex Systems Approach*. Cambridge University Press.

Course Schedule

Below is a tentative schedule with weekly themes linking **concepts** (C), **methods** (M), and **policy applications** (P). Required readings are listed for each week. Additional recommended readings are provided at the end of the syllabus.

Week 1 (August 25): Foundations of Social Complexity

- **Focus:** What is complexity? Why is the study of social complexity needed? How do complex adaptive systems challenge traditional policy paradigms?
- **Key Connections:**
 - (C) Intro to dynamical systems, emergence, feedback
 - (M) Identifying patterns in complex social systems

- (P) Implications for global political economy and governance: Political, economic, scientific and environmental changes that will continue to transform our world.
- **Readings:**
 - Roos, Michael. (2024). *Principles of Complexity Economics*, Chapter 1-2
 - Johnson, J. (2010). “The Future of the Social Sciences and Humanities in the Science of Complex Systems.” *Innovation* 23(2): 115–134.
 - Watch: Complexity Academy’s Social Complexity Overview

Week 2 (September 1): The Great Debate—Contrasts in Complexity and Neoclassical Economics

- **Focus:** Historical roots of state vs. market thinking in the light of complexity
- **Key Connections:**
 - (C) Hayek vs. Keynes—mechanistic vs. organic views
 - (M) Macro-level assumptions and policy design
 - (P) Shaping modern governance and economic policy
- **Readings:**
 - Roos, Michael. (2024). *Principles of Complexity Economics*, Chapter 4

Week 3 (September 8): Economy as a Complex Adaptive System

- **Focus:** Why the economy is a complex adaptive system and examples of a systems-view of the economy.
- **Key Connections:**
 - (C) Evolutionary economics and path dependence
 - (M) Agent-based modeling of wealth distributions
 - (P) Rethinking conventional development and trade policies
- **Readings:**
 - Roos, Michael. (2024). Chapter 5 – Chapter 8.
 - Arthur, B. (1997). *The Economy as an Evolving Complex System II*, Ch. 1
 - Arthur, B. (2015). *Complexity and the Economy*, selected chapters (1, 4–6, 9–12)

Week 4 (September 15): Modeling Techniques for Complex Systems

- **Focus:** Introduction to computational modeling in policy contexts
- **Guest Speaker:** Steve Scott (MITRE Corporation)
- **Key Connections:**
 - (C) Formalizing complex phenomena
 - (M) Agent-based models and other simulation approaches
 - (P) Evaluating policy scenarios in “virtual testbeds”

- **Readings & Resources:**
 - “[Different Modelling Purposes](#)” (Hilton Root), with Bruce Edmonds, Christophe Le Page, Mike Bithell, Edmund Chattoe-Brown, Volker Grimm, Ruth Meyer, Cristina Montañola-Sales, Paul Ormerod, and Flaminio Squazzoni, *Journal of Artificial Societies and Social Simulation*, vol. 22, no. 3, pp. 6, 2019.
 - Axtell, R. and Farmer, J.D. (2010). *Christian Science Monitor* article series on complexity and the economy
 - Explore: [MITRE's Complexity Research](#)

Week 5 (September 22): Global Finance—Contagion & Network Risks

- **Focus:** How do financial crises propagate through complex networks?
- **Key Connections:**
 - (C) Network topologies and systemic risk
 - (M) Network analysis, spillovers, feedback
 - (P) Designing regulatory frameworks and international financial governance
- **Readings:**
 - Elliot, M., Golub, B., & Jackson, M. (2014). “Financial Networks and Contagion.” *American Economic Review* 104(10): 3115–3153.
 - Ductor, L., & Leiva-Leon, D. (2016). “Dynamics of Global Business Cycle Interdependence.” *Journal of International Economics* 102: 110–127.
 - Root, H.L. (2012). “The Policy Conundrum of Financial Market Complexity.” In *Research Handbook on Banking and Governance*.

Week 6 (September 29): Networks—Connecting the Dots

- **Focus:** Network structures (scale-free, small-world) and their social-political implications
- **Key Connections:**
 - (C) Graph theory, hubs, and connectivity
 - (M) Visualizing and measuring networks
 - (P) Policy design for interconnected urban, transportation, and communication networks
- **Reading:**
 - Root, Hilton. (2020). *Network Origins of the Global Economy: East vs. West in a Complex Systems Approach*. Cambridge University Press. Chapters 2 & 3.

Week 7 (October 6): Culture, Cognition, & Social Evolution

- **Focus:** Shifts in norms, values and institutions. Cultural transmission, collective behavior, and the role of ideas in complex systems.
- **Key Connections:**

- (C) Evolution of norms and institutions
- (M) Modeling cultural dissemination (e.g., Axelrod's model)
- (P) Conflict resolution, governance, and polarization
- **Readings:**
 - Axelrod, R. (1997). "The Dissemination of Culture." *Journal of Conflict Resolution* 41(2): 203–226.
 - Root, H.L. (2016). "Fast, Slow and Endless Variation Drives Global Development." *Cambridge Review of International Affairs*.
 - Richerson, P.J., & Boyd, R. (2005). *Not by Genes Alone: How Culture Transformed Human Evolution*. University of Chicago Press. (Chapters 1–4)

Week 8 (October 13): No Class Fall Break

Week 9 (October 20): How Technology Evolves

- **Focus:** Technological change as a driver of policy shifts
- **Key Connections:**
 - (C) Technology as a combinatorial evolution
 - (M) Multi-level perspective in technology transitions
 - (P) Smart cities, public infrastructure, and innovation policy
- **Readings:**
 - Arthur, W.B. (2009). *The Nature of Technology*
 - Geels, F.W. (2005). "Process and Pattern in Transition and System Innovation." *Technological Forecasting & Social Change* 72: 681–696.
 - Genus, A., & Coles, A. (2008). "Rethinking the Multi-level Perspective of Technological Transitions." *Research Policy* 37: 1436–1445.

Week 10 (October 27): Great Transitions in Economic History

- **Focus:** Historical evolutions of economies through network shifts, disruptive innovation decision making in the face of fundamental uncertainty or societal transformation.
- **Key Connections:**
 - (C) Path-dependent institutional development
 - (M) Comparative historical analysis
 - (P) Understanding long-term policy implications of network changes
- **Reading:**
 - Root, H.L. (2020). *Network Origins of the Global Economy*. Cambridge University Press. Chapters 1, 4, and 6.

Week 11 (November 3): Law for a Complex Global Economy

- **Focus:** Legal structures enabling—or hindering—adaptation in global systems
- **Key Connections:**
 - (C) Evolution of formal and informal institutions
 - (M) Comparative law and institutional analysis
 - (P) Reinventing legal frameworks to manage global complexity
- **Readings:**
 - Hadfield, G.K. (2017). *Rules for a Flat World*
 - Root, H.L. (2020). *Network Origins of the Global Economy*. Cambridge University Press. Chapter 5.
 - Berman, Harold J. (1983). “Religious Foundations of Law in the West: An Historical Perspective,” *Journal of Law and Religion*. Volume 1 (No.1).

Week 12 (November 10): The Rise of China

- **Focus:** China’s ascent as a complex system phenomenon
- **Key Connections:**
 - (C) Network-based economic and political transformations
 - (M) Case study approach—international relations and complexity
 - (P) Global governance shifts, trade, finance, and security
- **Reading:**
 - Root, H.L. (2020). *Network Origins of the Global Economy*. Cambridge University Press. Chapters 7 & 8.

Week 13 (November 17): Coming Instability

- **Focus:** Geoeconomic Fragmentation, predicting and managing systemic shocks
- **Key Connections:**
 - (C) Fragility vs. resilience in global systems
 - (M) Stress-testing complex networks
 - (P) Policy interventions in crises, from pandemics to financial meltdowns
- **Readings:**
 - Root, H.L. (2020). *Networks Origins of the Global Economy*. Cambridge University Press. Chapters 9, 10 & 11.
 - Hilton Root, and Liu Baocheng (2024). “[The United States, China and the Dispersal of Power](#),” *Survival*. February-March.

Week 14 (November 24): Global Development and Complexity

- **Focus:** How do we design development aid and interventions in unpredictable contexts?

- **Key Connections:**
 - (C) Structural vs. triggering factors in crises
 - (M) Complex adaptive systems approach to development
 - (P) Tailoring assistance and governance solutions to local contexts
- **Readings:**
 - Root, H.; Jones, H.; & Wild, L. (2014). “Managing Complexity and Uncertainty in Development Policy and Practice.” (ODI Working Paper)
 - Ramalingam, B. (2013). Excerpt: “From Best Practice to Best Fit”
 - [Additional short pieces from ODI.](#)

Week 15 (December 1): Student Presentations & Course Synthesis (Part 1)

- **Focus:** Integrating concepts, methods, and policy applications
- **Activities:**
 - Final project presentations
 - Peer assessment
 - Course wrap-up and reflection

Week 16 (December 8): Student Presentations & Course Synthesis (Part 2)

- Last Day of Class

Week 17 (December 15): Final Paper Due

Conclusion

By the end of the semester, students will have developed a sophisticated understanding of how complexity science reshapes our approach to policy challenges. Through theory, modeling techniques, and case studies, this course will inspire students to design adaptive, robust policies suitable for a complex and ever-changing global environment.

University Policies and Academic Integrity

- **Special Needs:** If you are a student with a disability and need academic accommodations, please contact the Disability Resource Center (DRC) at (703) 993-2474 and discuss your needs with the instructor.
- **SPP Policy on Plagiarism:** Plagiarism will not be tolerated. Any instance of plagiarism will result in an automatic grade of “F” for the assignment and may lead to further penalties, including dismissal from the program. Students must submit all written work in electronic form upon request to be checked against databases and plagiarism-detection services.

- **GMU Honor Code:** All activities in this class are governed by the George Mason University Honor Code. Please refer to the University Catalog for details.
- **Additional policies** affecting this course, and additional resources or guidance regarding these policies, may be provided to students by the instructor.
- [Common Policies Affecting All Courses at George Mason University](#) These four policies affect students in all courses at George Mason University. This Course Policy Addendum must be made available to students in all courses (see [Catalog Policy AP.2.5](#)).

Academic Standards

Academic Standards exist to promote authentic scholarship, support the institution's goal of maintaining high standards of academic excellence, and encourage continued ethical behavior of faculty and students to cultivate an educational community which values integrity and produces graduates who carry this commitment forward into professional practice.

As members of the George Mason University community, we are committed to fostering an environment of trust, respect, and scholarly excellence. Our academic standards are the foundation of this commitment, guiding our behavior and interactions within this academic community. The practices for implementing these standards adapt to modern practices, disciplinary contexts, and technological advancements. Our standards are embodied in our courses, policies, and scholarship, and are upheld in the following principles:

- **Honesty:** Providing accurate information in all academic endeavors, including communications, assignments, and examinations.
- **Acknowledgement:** Giving proper credit for all contributions to one's work. This involves the use of accurate citations and references for any ideas, words, or materials created by others in the style appropriate to the discipline. It also includes acknowledging shared authorship in group projects, coauthored pieces, and project reports.
- **Uniqueness of Work:** Ensuring that all submitted work is the result of one's own effort and is original, including free from self-plagiarism. This principle extends to written assignments, code, presentations, exams, and all other forms of academic work.

Violations of these standards—including but not limited to plagiarism, fabrication, and cheating—are taken seriously and will be addressed in accordance with university policies. [The process for reporting, investigating, and adjudicating violations is outlined in the university's procedures here.](#) Consequences of violations may include academic sanctions, disciplinary actions, and other measures necessary to uphold the integrity of our academic community.

The principles outlined in these academic standards reflect our collective commitment to upholding the highest standards of honesty, acknowledgement, and uniqueness of work. By

adhering to these principles, we ensure the continued excellence and integrity of George Mason University's academic community.

Student responsibility: Students are responsible for understanding how these general expectations regarding academic standards apply to each course, assignment, or exam they participate in; students should ask their instructor for clarification on any aspect that is not clear to them.

Accommodations for Students with Disabilities

Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit the [Disability Services website](#) for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu. Phone: (703) 993-2474.

Student responsibility: Students are responsible for registering with Disability Services and communicating about their approved accommodations with their instructor in advance of any relevant class meeting, assignment, or exam.

FERPA and Use of GMU Email Addresses for Course Communication

The Family Educational Rights and Privacy Act (FERPA) governs the disclosure of education records for eligible students and is an essential aspect of any course. **Students must use their GMU email account** to receive important University information, including communications related to this class. Instructors will not respond to messages sent from or send messages regarding course content to a non-GMU email address.

Student responsibility: Students are responsible for checking their GMU email regularly for course-related information, and/or ensuring that GMU email messages are forwarded to an account they do check.

Title IX Resources and Required Reporting

As a part of George Mason University's commitment to providing a safe and non-discriminatory learning, living, and working environment for all members of the University community, the University does not discriminate on the basis of sex or gender in any of its education or employment programs and activities. Accordingly, **all non-confidential employees, including your faculty member, have a legal requirement to report to the Title IX Coordinator, all relevant details obtained directly or indirectly about any incident of Prohibited Conduct** (such as sexual harassment, sexual assault, gender-based stalking, dating/domestic violence). Upon notifying the Title IX Coordinator of possible Prohibited Conduct, the Title IX Coordinator will assess the report and determine if outreach is required.

If outreach is required, the individual the report is about (the “Complainant”) will receive a communication, likely in the form of an email, offering that person the option to meet with a representative of the Title IX office.

For more information about non-confidential employees, resources, and Prohibited Conduct, please see University Policy 1202: [Sexual and Gender-Based Misconduct and Other Forms of Interpersonal Violence](#). Questions regarding Title IX can be directed to the Title IX Coordinator via email to TitleIX@gmu.edu, by phone at 703-993-8730, or in person on the Fairfax campus in Aquia 373.

Student opportunity: If you prefer to speak to someone confidentially, please contact one of Mason’s confidential employees in [Student Support & Advocacy \(SSAC\)](#), Counseling and [Psychological Services \(CAPS\)](#), [Student Health Services \(SHS\)](#), and/or the [Office of the University Ombudsperson](#).

Publication Opportunity

Outstanding papers may be nominated for publication in **New Voices in Public Policy**, the School’s student- and faculty-reviewed journal. This is an excellent opportunity to showcase and disseminate high-quality policy analysis and research.

Topics of Recent Student Papers

- Pan-Islamism: A Quiet Network of Resilience
- Complexity of Space Object Behavioral Science: A Surveillance Network Toward Perfect Information
- Complexity Perspective on Bank Reserve Requirements
- Social Media and Policing
- Network Structures and Cyber Ecosystem Impacts of Government-Sponsored Non-State Cybercrime Organizations

Recommended Readings & References

A detailed list of supplementary readings is provided at the end of this document. Students interested in additional **software and toolkits** (e.g., NetLogo, MASON, Repast) for agent-based modeling will find relevant links and tutorials in the supplementary material.

Recommended Readings and References

Books (denotes that the book is available online through the GMU library)*

- Beinhooker, E. (2006). *The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics*.

- Burns, Danny, and Stuart Worsley. 2015. *Navigating Complexity in International Development: Facilitating Sustainable Change at Scale*. Rugby, Warwickshire: Practical Action Publishing.
- *Cederman, Lars-Erik. 1997. *Emergent Actors in World Politics: How States and Nations Develop and Dissolve*. Princeton, N.J: Princeton University Press.
- *Colander, David C, and Roland Kupers. 2016. *Complexity and the Art of Public Policy: Solving Society's Problems from the Bottom Up*. Princeton, NJ: Princeton University Press.
- *Crowley, Kate, Jenny Stewart, Adrian Kay, and Brian William Head. 2020. *Reconsidering Policy: Complexity, Governance and the State*. Bristol, UK Chicago, IL, USA: Policy Press.
- Dennard, Linda F., Kurt A. Richardson, and Göktuğ Morçöl, eds. 2008. *Complexity and Policy Analysis: Tools and Concepts for Designing Robust Policies in a Complex World. Exploring Organizational Complexity 2*. Goodyear, AZ: ISCE Pub.
- Epstein, Joshua M., and Robert Axtell. 1996. *Growing Artificial Societies: Social Science from the Bottom Up*. Washington, D.C: Brookings Institution Press.
- Furtado, Bernardo, Patricia Sakowski, and Marina Tóvolli, eds. 2015. [Modeling Complex Systems for Public Policies. Brasilia, Brazil: Institute for Applied Economic Research](#).
- Gaylord, Richard J., and Louis J. D'Andria. 1998. *Simulating Society: A Mathematica Toolkit for Modeling Socioeconomic Behavior*. New York: Springer.
- Geyer, Robert, and Paul Cairney. 2015. *Handbook on Complexity and Public Policy*. Cheltenham UK: Edward Elgar.
- *Geyer, Robert, and Samir Rihani. 2010. *Complexity and Public Policy: A New Approach to Twenty-First Century Politics, Policy and Society*. London; New York: Routledge.
- Grabel, I. (2017). *When Things Don't Fall Apart: Global Financial Governance and Developmental Finance in an Age of Productive Incoherence*. MIT Press.
- *Harrison, Neil E., and Robert Geyer. 2021. *Governing Complexity in the 21st Century*. London: Routledge.
- *Haynes, Philip. 2015. *Managing Complexity in the Public Services*. Routledge.
- *Head, Brian W. 2022. *Wicked Problems in Public Policy: Understanding and Responding to Complex Challenges*. Springer Nature.
- Jackson, Michael C. 2019. *Critical Systems Thinking and the Management of Complexity*. 1st edition. Hoboken, NJ: Wiley.
- Martens, B (2005) 'Why do Aid Agencies Exist?' In *Development Policy Review*, 23 (6): 643–663.
- *Mandl, Christoph E. 2019. *Managing Complexity in Social Systems: Leverage Points for Policy and Strategy*. Management for Professionals. Cham: Springer International Publishing.

- *Morçöl, Göktug. 2012. *A Complexity Theory for Public Policy*. Routledge Research in Public Administration and Public Policy 1. New York: Routledge.
- OECD. 2017. [*Debate the Issues: Complexity and Policy Making*](#). OECD Insights. Paris France: OECD.
- Ramalingam, Ben. 2015. *Aid on the Edge of Chaos: Rethinking International Cooperation in a Complex World*. Oxford: Oxford Univ. Press.
- Ramalingam, Ben, and Harry Jones. 2008. *Exploring the Science of Complexity: Ideas and Implications for Development and Humanitarian Efforts*. London: Overseas Development Institute.
- Rihani, S. (2002) *Complex Systems Theory and Development Practice: Understanding Non-linear Realities*, London: Zed Books.
- Roe, Emery. 1998. *Taking Complexity Seriously Policy Analysis, Triangulation and Sustainable Development*. Springer Verlag.
- Room, Graham. 2011. *Complexity, Institutions and Public Policy: Agile Decision-Making in a Turbulent World*. Cheltenham: Edward Elgar.
- Root, H.L. (2013). *Dynamics among Nations: The Evolution of Legitimacy and Development in Modern State*. MIT Press.
- Westley, Frances, Michael Quinn Patton, and Brenda Zimmerman. 2007. *Getting to Maybe: How the World Is Changed*. Toronto: Vintage Canada.

Journal Articles & Working Papers

- Axelrod, Robert. 1997. "The Dissemination of Culture: A Model with Local Convergence and Global Polarization." *Journal of conflict resolution* 41(2): 203–226
- Casti J. L. (1998), Developing and Applying Complex Adaptive Models, Strategy & Complexity Seminar, London School of Economics, 15 May.
- Michael, Bryane. 2004. "Explaining Organizational Change in International Development: The Role of Complexity in Anti-Corruption Work." *Journal of International Development* 16(8): 1067–88.
- Rihani, S. (2005) 'Complexity Theory: A New Framework for Development is in the Offing', *Progress in Development Studies* 5(1).

Journals

- [Journal on Policy and Complex Systems](#)
- [Emergence: Complexity and Organization](#)
- [Complexity, Governance, & Networks](#)

Journal Special Issues

- Complexity – 2022: Public Policy Modeling and Applications 2021
- Complexity – 2019: Public Policy Modeling and Applications
- Emergence: Complexity and Organization – 2010: 12(1): Complexity Theory for

Public Administration and Policy

- Public Management Review – 2008: 10(3): Complexity Theory and Public Management
- Public Administration Quarterly – 2008: 32(3): Complexity of Public Policy and Administration
- Emergence: Complexity & Organization – 2005: 7(1): Complexity and Policy Analysis

Videos

- [Chaos, Complexity, and Public Policy](#) Irene Sanders (2013, 28:30, ok, not great)
- [Complexity in public policy: metaphors and methods - inaugural lecture from Professor Phil Haynes](#) (2009, 59:50, skip to 2:30, some interesting stuff, but does not seem to like CSS tools and modeling)
- [Complexity and the Art of Public Policy](#) – David Colander (2014, 1:10:00, Q&A start at 31:35, quite good)
 - [Lerner “The Economics of Control”](#)
 - [Replicator dynamics: rules of change](#)
 - [Economics of Influence](#)
- [Centennial Webinar: Managing Complexity Across Public Policy Challenges](#) (21 Sep 2021, 1:59:30, skip to 4:45, pretty long, not in class)
- [Addressing Public Policy Problems Through Complex Adaptive Systems Thinking | Dr. Naresh Singh](#) (8:40, 2022; generally nice)
- ["Complexity & Public Management" ~ Dr. Toby Lowe ~ Stanford Complexity Group](#) (1 Oct 2018, 55:27, ok, not great)

Other

- In Brief: Complexity and Public Policy
- [Complexity Economics, Applied Spirituality and Public Policy \(CEASP\)](#)
- [Washington Center for Complexity & Public Policy](#) – not active, but some stuff there