Course program and reading list

School: Lauder School of Government, Diplomacy & Strategy B.A

Government and Big Data

Lecturer:

Dr. Jennifer Shkabatur   jshkabatur@runi.ac.il

Teaching Assistant:

Mr. Edward Geisman   edward.geisman@post.runi.ac.il

Course No.:	Course Type :	Weekly Hours :	Credit:
6921	Lecture	3	3

Course Requirements :	Group Code :	Language:
Final Paper	242692100	English

◎ Course Description

The course will explore the impacts of big data and algorithms on governance and public policy, examining political, social, technological, legal, and economic aspects. The course consists of four parts.

First, we will examine who governs the internet--individuals, democratic or authoritarian states, or private corporations? We will trace the evolution of internet freedom and control, and examine censorship, surveillance, and other online points of control.

Second, we will understand the workings of big data, artificial intelligence, machine learning, and large-language models (e.g., ChatGPT). We will also delve into an analysis of the politics and social constructions of big data and algorithms.

Third, we will explore the impacts of big data and algorithms on modern-age governance, by examining specific sectors and cases. This will include government services,

government transparency & accountability, smart cities, elections, democratic participation policing, and education.

Lastly, the course will conclude with a discussion on whether we are turning into a data-scored society, drawing on the experience of both democratic and authoritarian countries.

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Course Goals

The course will explore the impacts of big data and algorithms on governance and public policy, examining political, social, technological, legal, and economic aspects.

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Grading

The grade for the course will be comprised of the following components:

- Final paper (70%).
- Mini quizzes (25%).
- Active participation (5%).
- Bonus of up to 5 points for outstanding participation in class (subject to the professor's full discretion)

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Lecturer Office Hours

By appointment via email: jshkabatur@runi.ac.il

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Tutor Office Hours

By appointment via email: edward.geisman@post.runi.ac.il

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Teaching Assistant

Mr. Edward Geisman

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Reading List

Part I. Who Governs the Internet?

(1) Between Freedom and Power Online

- Yochai Benkler, *Wealth of Networks*, "Introduction," pp. 1–16 (2006)
- Tim Wu, *The Master Switch*, "Introduction," pp. 3-14 (2011)
- Shoshana Zuboff, *The Age of Surveillance Capitalism,* "Introduction," pp. 11–23 (2019)
- *Optional:* Yochai Benkler, "Degrees of Freedom, Dimensions of Power," *Daedalus* 145 (1): 18–32 (2016)

(2) Speech, Censorship & Points of Control

- Tarleton Gillespie, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions that Shape Social Media*, Chapter 1, pp. 1–23 (2018)
- Elizabeth C. Economy, "The great firewall of China: Xi Jinping's internet shutdown," *The Guardian*, June 29, 2018
- *Freedom in the World 2024: The Mounting Damage of Flawed Elections and Armed Conflict*, pp. 2-20 (2024)
- *Optional:* Tarleton Gillespie, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions that Shape Social Media*, Chapter 2, pp. 24–44 (2018)

Part II. Understanding Big Data and Algorithms

(1) Understanding the Basics: Big Data, Artificial Intelligence, Machine Learning & LLMs

- **The Sources:** Kate Crawford, *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence,* Chapter 1, pp. 23-52 (2021)
- **Big data**: Seth Stephens-Davidowitz, *Everybody Lies: Big Data, New Data, and What the Internet Can Tell Us About Who We Really Are*, "Introduction," pp. 9–24 (2017)
- **Artificial Intelligence**: Meredith Broussard, "Hello, AI," in *Artificial Unintelligence*, MIT Press, Chapter 3, pp. 44-55 (2018)
- **Machine Learning**: Sara Brown, "Machine learning, explained," *MIT Ideas Made to Matter* (2021)
- **Large Language Models:** Andreas Stöffelbauer, "How Large Language Models Work? From Zero to ChatGPT", *Medium*, October 2023

(2) The Politics of Big Data & Algorithms

- Edward Tufte, Envisioning Information, pp. 12–37 (1990)
- Jeremy Rifkin, The End of Work, pp. 59–68 (1995)
- danah boyd and Kate Crawford, "Critical Questions for Big Data," *Information, Communication & Society*, pp. 662–675 (2012)
- Mittelstadt et al., "The ethics of algorithms: Mapping the debate," Big Data & Society (2016)
- Taina Bucher, If...Then: Algorithmic Power and Politics, Introduction (2018)
- *Optional:* TEDx, Evan Barba: Why we need to understand the politics inherent in technology (2018)

Part III. The Impacts of Big Data and Algorithms on Government

(1) Government Services

- Klaus Schwab, "The Fourth Industrial Revolution: what it means, how to respond", World Economic Forum, January 14, 2016
- World Economic Forum, Reimagining Policymaking in the Fourth Industrial Revolution pp. 4-10 (2018)
- Jamie Berryhill et al., "Hello, World: Artificial Intelligence and Its Use in the Public Sector" (OECD) (2019)
- United Nations, E-Government Survey 1-11(2022)

(2) Government Transparency & Accountability

- Archon Fung, Mary Graham & David Weil, *Full Disclosure: The Perils and Promise of Transparency*, pp. 1-15 (2007)
- Beth Noveck, "Rights-Based and Tech-Driven: Open Data, Freedom of Information, and the Future of Government Transparency," *Yale Human Rights & Development Law Journal* (2017) pp. 3-9, 24-39
- Jennifer Shkabatur, "The Global Commons of Data," *Stanford Technology Law Review*, pp. 9-25 (2019)

(3) Smart Cities

- Anthony M. Townsend, *Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia,* chapter 8 "A Planet of Civic Laboratories" (2013)
- Julia Powles, "New York City's Bold, Flawed Attempt to Make Algorithms Accountable," *New Yorker*, December 20, 2017
- World Economic Forum, "Governing Smart Cities: Policy Benchmarks for Ethical and Responsible Smart City Development," (2021)

(4) Elections

- Nathaniel Persily, "The 2016 U.S. Election: Can Democracy Survive the Internet?" *Journal of Democracy* 28(2) 63-76 (2017)
- Daniel Buchuk, "With all the behavioral data available about US voters, can Big Data predict the election results?" *Rivery.io* (October 2020)

(5) Democratic Participation

- Ralf Lindner and Georg Aichholzer, "E-Democracy: Conceptual Foundations and Recent Trends," European E-Democracy in Practice, Studies in Digital Politics and Governance (L. Hennen et al. (eds.)), pp. 11-23 (2020)
- Julie Simon, Theo Bass & Geoff Mulgan, Digital Democracy: The Tools Transforming Political Engagement," NESTA (2017), pp. 65-83

(6) Policing

- Angwin Julia, Larson Jeff, Mattu Surya, and Krichner Lauren. 2016. Machine Bias. ProPublica, May 23, 2016.

- Aaron Shapiro, "Reform Predictive Policing," *Nature* 541, 458–460 (26 January 2017)
- Kashmir Hill, "Wrongfully Accused by an Algorithm," The New York Times (2020)
- Virgina Eubanks, *Automating Inequality*, Video Discussion (2017)

(7) Education

- Meredith Broussard, "Why Poor Schools Can't Win at Standardized Tests," in *Artificial Unintelligence*, MIT Press, Chapter 5, pp. 68-87 (2018)
- Daan Kolkman, "'F**k the algorithm'?: What the world can learn from the UK's A-level grading fiasco," LSE Impact Blog (2020)

Part IV. The Data-Scored Society?

- Bruce Shneier, *Data and Goliath, The Hidden Battles to Collect Your Data and Control Your World* (2015), excerpts
- Fan Liang et al., "Constructing a Data-Driven Society: China's Social Credit System as a State Surveillance Infrastructure," *Policy & Internet*, 10:4, pp. 419-421, 424-435 (2018)
- Frank Pasquale, "Quantifying Love," *Boston Review*, April 4 (2019)