HISTORY OF THE FUTURE

Online (asynchronous remote) | Rutgers University-New Brunswick

Instructor

Professor Jamie Pietruska <u>pietrusk@history.rutgers.edu</u> Van Dyck 311 848.932.8544

Online office hours (via Zoom):
M 11:00 am -12:30 pm ET
W 1:15 pm - 2:45 pm ET
or by appointment

Course info

This course meets <u>SAS Core</u> goals <u>CCO</u> & <u>HST</u> and counts toward the <u>STEM in Society minor/certificate</u>. No prerequisites. No prior experience in History necessary.

Course tools

Books:

-Naomi Oreskes & Erik M. Conway, The Collapse of Western Civilization: A View from the Future (ISBN: 9780231169547) -Nate Silver, The Signal and the Noise: Why So Many Predictions Fail-but Some Don't (ISBN: 9780143125082)

Available through the <u>Rutgers</u>
<u>University Barnes & Noble</u>
<u>Bookstore</u> and from online
retailers. Freely accessible as
ebooks on online <u>course reserves</u>
through <u>Rutgers Libraries</u>.

LMS: Canvas

Technology: computer or tablet with Internet connection needed



Course description

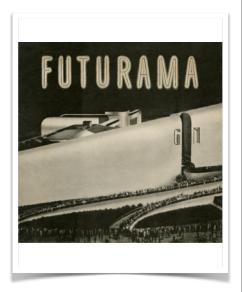
Prediction is a ubiquitous feature of daily life in the twenty-first century. Every day we encounter a steady stream of macro-level forecasts in the news cycle, as economists predict rates of growth and employment, pollsters predict results of elections years away, and climate scientists model the increasingly bleak scenarios of our planetary future. And every day we consult an array of forecasts to guide our individual decision-making, ranging from weather forecasts to market outlooks to sports picks. Since the Great Recession of 2008, interest in astrology has boomed, and science-fiction films continue to sell out at the box office. Visions of the future—whether calculated or imagined—are a central part of the present. Yet the future also has a past.

This course examines the global history of human attempts to predict the future ranging from antiquity to the present, with an emphasis on the nineteenth, twentieth, and twenty-first centuries. The course begins from two basic premises, the first of which is that predicting the future is not a timeless human activity. Rather, ideas about prediction and methods of forecasting have changed over time in response to major changes in political economy, society, and culture. The second premise is that visions of the future have often exerted influence on the present. Decision-making in a particular historical moment is shaped by what human actors anticipate will come next, as well as by their illusions of control over an unpredictable future.



Course format

- Online (asynchronous remote, with occasional optional synchronous meetings throughout the semester)
- Emphasis on multimedia sources (including video lectures, documents, maps, visual art, film, television clips, and podcasts)
- The success of our course will depend on your active and thoughtful engagement with the course material and each other, so please complete all the reading and activities for each module and share your ideas, comments, and questions with your classmates and the professor.



Big questions

Our approach will be historical, but we will engage with topics and concepts from disciplines including economics, statistics, meteorology, computer science, behavioral economics, psychology, and literature. We will spend the semester reading and discussing a combination of primary and secondary sources to examine scientific and technological attempts to predict and control the future, changing ideas about the future, and artistic representations of futuristic societies. We will consider the following major questions:

- •How have ideas about the future and technoscientific attempts to anticipate and control it changed over time?
- •How have innovations in science, technology, and capitalism been designed, sometimes unsuccessfully, to reduce future risks and uncertainties?
- •How did the future become a battleground in global geopolitics?
- •How have ideologies of race, class, and gender shaped particular visions of the future?
- •How have ideologies of progress shaped visions of the future that privilege certain social groups while excluding others?
- •At which historical moments has forecasting been the most consequential, the most controversial, and why?
- •How and why have some forecasters become recognized as authorities and experts while others have not?
- •How have forecasters reckoned with and communicated the uncertainty inherent in predicting the future?
- •How have failed predictions affected public trust in experts and in the nature of forecasting itself?
- •How have utopian and dystopian futures emerged from critiques of political economy at particular historical moments?
- •How has the concept of *the future* animated religious belief and scientific inquiry?
- •How have literary, visual, and exhibition cultures reflected and shaped changing ideas about the future?

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SAS Core learning goal for Historical Analysis [HST]

Employ historical reasoning to study human endeavors, using appropriate assumptions, methods, evidence, and arguments.

SAS Core learning goal for Contemporary Challenges [CCO]

Analyze the relationship that science and technology have to a contemporary social issue

Course learning goals

- •Understand the historical relationship between ideas about the future and attempts to use scientific knowledge and technological innovations to predict the future
- •Analyze how the concept of *the future* has changed over time
- •Examine how political and economic institutions, as well as social practices, have shaped the production of knowledge about the future
- •Analyze how how ideologies of race, class, and gender have shaped and restricted visions of the future
- •Read and interpret primary sources
- Analyze and synthesize secondary sources
- •Write analytically about multiple primary and secondary sources

How to succeed in this course

1. Stay engaged

Our ongoing, collective conversation about the course material and reading is the single most important part of this course, and it depends on your engagement!

Students in this course come from across the disciplines, and everyone brings a valuable perspective to the topics we will study. My hope is that we can take advantage of our online format to engage with the material and with each other in different ways than we would in a classroom setting.

This is an **asynchronous remote** course, which means that you can log on to our Canvas site each week to do your coursework at whatever days and times are best for you. We will have occasional **optional** synchronous Zoom meetings throughout the semester to discuss course material in advance of papers and exams.

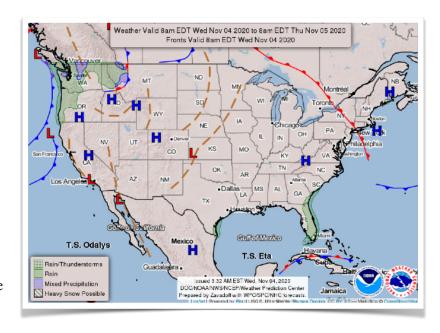
The course is organized into 14 weeks of online modules, with typically 2 modules for each week. The new modules will be posted at the same time each week, and you will have 10 days to complete each module's assignments on Canvas. The modules will be left open for an additional 5-day grace period to accommodate any late submissions (without grade penalty) but will close permanently at the end of the 5-day grace period. Modules will include short video lectures, a variety of multimedia sources, and opportunities for students to interact with each other and with the professor through Canvas discussion forums and the social annotation tool Hypothesis.

Another way to stay engaged in the course is to communicate by email with the professor and visit online Zoom office hours to clarify and deepen your understanding of the course material.

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Your online engagement will be the basis of your citizenship/class participation grade, and it is highly unlikely that you will be able to succeed on paper assignments and exams without regular engagement with the weekly modules.

I understand that you may occasionally have to miss an assignment due to illness or other extenuating circumstances. In the event that you do fall behind in the course for whatever reason,



please contact me by email as soon as possible so that I can help you catch up. I understand that everyone is doing their best under the extremely adverse conditions of a global pandemic, and I will do everything I can to make this course as flexible as possible for anyone who needs accommodations.

2. Do the reading

Reading assignments should be completed for each module as we will use the readings as the basis for online Canvas discussion and other interactive activities. **It is important to take notes in some way as you read** (e.g., underlining, highlighting, annotating, writing notes on a text's main arguments and themes, writing down questions, noting any confusing or seemingly contradictory aspects of the reading, etc.)

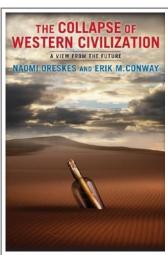
Required books:

Naomi Oreskes and Erik M. Conway, *The Collapse of Western Civilization: A View from the Future* (Columbia University Press, 2014), paperback. ISBN: 9780231169547

Nate Silver, The Signal and the Noise: Why So Many Predictions Fail—but Some Don't (Penguin, 2015), paperback. ISBN: 0143125087

Available for purchase through the <u>Rutgers University Barnes & Noble</u>
<u>Bookstore</u> and online retailers. **Digital copies are freely accessible** on <u>online course reserves</u> through the <u>Rutgers Libraries</u>.

Additional short readings will be posted on Canvas.



Assessment

15% Paper #1 (4-page essay on Module 3.2)

15% Midterm exam (take-home project)

20% Paper #2 (5-page essay on Oreskes & Conway book)

15% Final exam (discussion posts on Week 14 modules)

25% Online participation

Both papers and both exams must be completed to pass the course.

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3. Complete assignments on time

You will receive detailed instructions for each paper and exam well in advance of the due date. Read the instructions carefully and plan ahead. Come to Zoom office hours to discuss your ideas with the professor. (Don't wait until the night before the paper is due to start the assignment!)

Writing Tutor

Visit the <u>History Writing Tutor</u> to get expert help with any stage of your writing process. Check out the <u>History Writing Tutors webpage</u> for step-by-step writing guides covering everything from brainstorming to comma use.

Submissions

There is a rolling submission period of one week for both paper assignments and the take-home midterm exam so that you can balance your workload for this course with your other courses and commitments.

- •Paper #1 is due the week of Feb 14. You may submit it on Canvas anytime between Feb 14 and Feb 21.
- The midterm exam is due the week of Feb 28. You may submit it on Canvas anytime between Feb 28 and Mar 7.
- •Paper #2 is due the week of Apr 18. You may submit it on Canvas anytime between Apr 18 and Apr 25.

Late submissions will not be accepted beyond the rolling submission period for major assignments or module assignments without a letter from the <u>Dean of Students</u>.



Grading

Final course grades will be calculated according to the following scale, conforming to University policy that uses "+" but not "- "grades:

- A 90% & above
- B+ 85-89%
- B 80-84%
- C+ 75-79%
- C 70-74%
- D 60-69%
- F 59% & below
- Our Canvas grade book will be updated regularly throughout the semester, so make sure to check your grades so that you know where you stand.
- If you would like to discuss your grades at any point, please come to office hours or make an appointment to speak with the professor. Please note that I do not discuss grades over email.
- There are no extra credit assignments in this course.

Online discussion activities

Our weekly modules will offer you regular opportunities to engage with the material and each other through Canvas. Your participation will be assessed based on the quality and quantity of your contributions to your Canvas discussion group and other online platforms that we will use.

Class participation rubric

- A Student participated meaningfully in every, or nearly every, Canvas group activity; offered comments and/or questions that reflected substantive engagement with the assigned material; and responded thoughtfully to the other students' contributions
- B Student excelled in most of the above ways, but fell short on 1 or 2 of the criteria (e.g., had more than a few instances of no participation, *or* about 1/3 of the time made comments that reflected only a superficial engagement with the assigned material)
- Either the student excelled in some criteria but fell short in others (e.g., made frequent comments in Canvas group activities but comments were not relevant to the topic or did not reflect engagement with the assigned material), or the student performed merely adequately on all the above criteria (e.g., only sometimes participated in Canvas group activities)
- **D** Student did not meet most of the criteria overall, but occasionally did meet one of the above criteria
- **F** Student did not engage with the video lectures, assigned material, or Canvas group activities throughout the semester

4. Contribute to our intellectual community

Citizenship

The Department of History's "Policy on Mutual Responsibilities and Classroom Etiquette" states, "Our commitments to a strong learning community are expressed in many ways. Respectful professors convey their commitment to the discipline of history and their desire to share its delights and challenges. They are well prepared for class, provide students with clear goals and expectations, listen carefully to student questions and comments, and conscientiously evaluate their students' work. Respectful students bring a strong work ethic to the history courses that they select. They expect to attend the scheduled classes, to be on time, to be prepared for class, and to be attentive during class. A shared respect for the discipline of history and for one another as teachers and students of history is essential to the academic integrity of our program. We must all do our part to maintain an environment of openness and civility that encourages and honors the intellectual achievement represented by the discipline of history."

Each of you is a valuable member of our intellectual community this semester, and I trust that you will conduct yourselves accordingly. My goal is that our online class will be a space for thoughtful, sustained, and respectful engagement with the course material and with each other.



I trust that you will make your best effort to help us achieve this goal by doing the following:

- •Keeping up with the weekly modules to the best of your ability
- •Participating thoughtfully in online discussions and other class activities
- Working collaboratively and productively in your Canvas discussion group

25 percent of your course grade will be based on online participation & citizenship



5. Ask for help when you need it

I would like everyone to succeed in this course and am always happy to help however I can. Please don't hesitate to contact me with any questions or concerns as soon as they arise.

Contacting the professor

I am available during online office hours each week or by appointment. I check email regularly and will reply as soon as I can. In compliance with the Family Educational Rights and Privacy Act (FERPA), please use your Rutgers ScarletMail account (not a personal email account) to communicate with your professors and teaching assistants. As the Rutgers University Ethics and Compliance webpage states, "All Rutgers University students, staff, and instructors are assigned a university managed email account to be utilized for purposes of official correspondence."

Student wellness & technology resources

Rutgers Universitywide COVID-19 Information

https://coronavirus.rutgers.edu/

Rutgers Learning Centers Remote Instruction

Learning remotely presents new challenges. For assistance with learning how to address these challenges, please consult the resources available here: https://rlc.rutgers.edu/remote_instruction

Rutgers Student Technology Resources

Please visit the <u>Rutgers Student Tech Guide</u> page for resources available to all students. If you do not have the appropriate technology for financial reasons, please email the Dean of Students <u>deanofstudents@echo.rutgers.edu</u> or complete the <u>contact form</u> for assistance. If you are facing other financial hardships, please visit the Office of Financial Aid at https://financialaid.rutgers.edu/.

Just In Case Web App

http://codu.co/ceeo5e

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ http://health.rutgers.edu/medical-counseling-services/counseling/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professionals within Rutgers Health Services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / https://ods.rutgers.edu/

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

Scarlet Listeners

(732) 247-5555 / https://rutgers.campuslabs.com/engage/organization/scarletlisteners
Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.

Report a Concern: http://health.rutgers.edu/do-something-to-help/

Basic Needs Security: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the <u>Dean of Students</u> for support. Also, if you are comfortable doing so, please notify the professor so that she can help however she can and connect you with campus resources.

Office of the Dean of Students

http://deanofstudents.rutgers.edu/

88 College Avenue New Brunswick, NJ 08901 848-932-2300 deanofstudents@echo.rutgers.edu

Rutgers Student Food Pantry

http://ruoffcampus.rutgers.edu/food/

39 Union Street New Brunswick, NJ 08901 848-932-5500 ruoffcampus@echo.rutgers.edu

Academic Integrity Policy

The foundation of this course and any scholarly endeavor is academic integrity. I fully expect that all students will adhere to principles of academic integrity in their work. You are responsible for understanding the Rutgers University policies regarding academic integrity. Ignorance of these policies or the consequences for violations is not an acceptable excuse. All written work must be a student's own original work. Collaboration on writing assignments (i.e., essays and take-home exams) is not permitted. Any and all references to sources within your own essays must be properly cited according to the bibliographic conventions of the Chicago Manual of Style, which is available through the Alexander University Durdue Online Writing Lab.

If you have any questions about quoting, paraphrasing, or referring to the work of others, please ask! It is better to be safe than sorry—better to have too many citations than too few and thus run the risk of unintentional plagiarism. Any and all violations of academic integrity in this course will result in the formal consequences and disciplinary action that are outlined in the Rutgers policies on academic integrity. I have a zero-tolerance policy for academic dishonesty and refer all violations directly to the Office of Student Conduct.

Students with Disabilities

Rutgers, the State University of New Jersey abides by the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments (ADAA) of 2008, and Sections 504 and 508, which mandate reasonable accommodations be provided for qualified students with disabilities and accessibility of online information. If you have a disability and may require some type of instructional and/or examination accommodation, please contact the professor during the first week of the semester so that we can arrange accommodations. If you have not already done so, you will need to register with the Office of Disability Services, Lucy Stone Hall, Livingston Campus, 54 Joyce Kilmer Ave., Suite A145. Phone: 848.445.6800 Online: https://ods.rutgers.edu/

Schedule

The professor reserves the right to modify the schedule (e.g., shortening or eliminating assignments) as warranted by the ongoing public health emergency or other unforeseen events. Weekly modules will be based on **some (not all)** of the following readings (some required and some recommended).

Week 1: Knowing the 21st-century Future

Week of Jan 18

Module 1.1 Introduction: Calculating and Imagining the Future in the 21st Century

Discussion of predictive analytics and affective forecasting Dan Gilbert, "Why We Make Bad Decisions," TED Talk (24 min.)

Recommended: Daniel Gilbert, Stumbling on Happiness (New York: Alfred A. Knopf, 2006), pp. 3-25 (Chapter 1: "Journey to Elsewhen")

Module 1.2 Superforecasters and Black Swans

Philip E. Tetlock and Dan Gardner, *Superforecasting: The Art and Science of Prediction* (Broadway Books, 2016), ch. 4 ("Superforecasters") and appendix ("Ten Commandments for Aspiring Superforecasters")

Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable*, 2nd ed. (Random House, 2010), prologue

Week 2: Theorizing & Historicizing the Future

Week of Jan 24

Module 2.1 Contested Futures

Reinhart Koselleck, *Futures Past: On the Semantics of Historical Time* (Columbia UP, 2004 [originally published by MIT Press, 1985]), ch. 14 ("Space of Experience' and 'Horizon of Expectation': Two Historical Categories")

Jenny Andersson, *The Future of the World: Futurology, Futurists, and the Struggle for the Post-Cold War Imagination* (Oxford UP, 2018), ch. 2 ("A New History of the Future? From Conceptual History to Intellectual World History")

Module 2.2 Using Historical Methods to Understand the Futures of the Past

W. T. Foster, *Long-Range Forecasts*, undated pamphlet [Canvas]

Recommended:

David C. Engerman, "Introduction: Histories of the Future and the Futures of History," *American Historical Review* 117, no. 5 (2012): 1402-1410

Asa Briggs, "The Historian and the Future," Futures 10, no. 6 (1978): 445-451

David J. Staley, "A History of the Future," History and Theory 41, no. 4 (December 2002): 72-89.

UNIT 1: PROPHECIES & WAYS OF KNOWING THE FUTURE

Week 3: Prophecy & Apocalypse

Week of Jan 31

Module 3.1 Prophetic Traditions

Walid A. Saleh, <u>"Prophecy and Revelation in Islam,"</u> Discovering Sacred Texts, British Library, September 2019, https://www.bl.uk/sacred-texts/articles/prophecy-and-revelation-in-islam

NPR Fresh Air, interview with Elaine Pagels, author of Revelations: Visions, Prophecy, and Politics in the Book of Revelation, March 7, 2012

Recommended:

Paul Boyer, When Time Shall Be No More: Prophecy Belief in Modern American Culture (Belknap Press, 1992), ch. 1 ("Origins of the Apocalyptic")

Islam: A Very Short Introduction (Oxford UP, 2012), ch. 2 ("The Quran and the Prophet")

Module 3.2 It's the End of the World as We Know It

Nick Yablon, "The League of Planets," *History Today*, January 2020 [Canvas]

Leon Festinger, Henry W. Riecken, and Stanley Schachter, When Prophecy Fails: A Social and Psychological Study of a Modern Group that Predicted the Destruction of the World (University of Minnesota Press, 1956), chs. 2, 8, epilogue [Canvas]

Recommended:

The Disappointed: Millerism and Millenarianism in the Nineteenth Century, eds. Ronald L. Numbers and Jonathan M. Butler (Knoxville: University of Tennessee Press, 1993), pp. 17-35 (ch. 2: "William Miller: Disappointed Prophet"), pp. 209-226 (Appendix I: "The Disappointment Remembered") [Canvas]



Week 4: Foreknowledge of the Natural World

Week of Feb 7

Module 4.1 Predicting Hurricanes, Typhoons, and Earthquakes

Stuart B. Schwartz, Sea of Storms: A History of Hurricanes in the Greater Caribbean from Columbus to Katrina (Princeton UP, 2015), ch. 1 ("Storms and Gods in a Spanish Sea")

James F. Warren, 'Weather, History and Empire: The Typhoon Factor and the Manila Galleon Trade, 1565-1815' in Geoff Wade and Li Tana, eds., *Anthony Reid and the Study of the Southeast Asian Past* (Singapore: ISEAS, 2012), pp. 183-220

Fa-ti Fan, "Can Animals Predict Earthquakes?: Bio-sentinels as Seismic Sensors in Communist China and Beyond," Studies in History and Philosophy of Science (Part A) 70 (August 2018): 58-69

Recommended: Martin Mahony, "The 'Genie of the Storm': Cyclonic Reasoning and the Spaces of Weather Observation in the Southern Indian Ocean, 1851-1925," British Journal for the History of Science 51, no. 4 (2018): 607-633

Module 4.2 Meteorology as an Imperial Science

Katharine Anderson, *Predicting the Weather: Victorians and the Science of Meteorology* (Chicago UP, 2005), ch. 6 ("Science, State, and Empire)

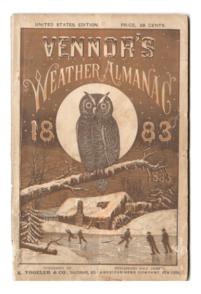
Recommended: Jamie L. Pietruska, "Hurricanes, Crops, and Capital: The Meteorological Infrastructure of American Empire in the West Indies," Journal of the Gilded Age and Progressive Era 15, no. 4 (2016): 418-45

Week 5: Weather Prediction in Daily Life

Week of Feb 14

Paper #1 due this week

Module 5.1 Weather Prophecy



Skim <u>Vennor's Almanac and Weather Record for 1877-8</u> (Montreal: John Dougall, 1877) [Flip through the book, pausing to read sections that are of most interest to you. Think about all the different types of information and knowledge that are contained in this almanac. How might readers in 1877 have used the different parts of the book? How would you characterize Henry Vennor's forecasts and his method?]

Katharine Anderson, "The Weather Prophets: Science and Reputation in Victorian Meteorology," *History of Science* 37 (1999): 179-216

Module 5.2 Weather Forecasting

Willis L. Moore, *Moore's Meteorological Almanac and Weather Guide* (Rand, McNally, 1901) [Flip through the book, reading carefully the preface, pp. 32-38, 53-60, 102-110. How does Moore's almanac compare to Vennor's? How does Moore describe the system of government weather forecasting?

How does Moore define the boundary between *forecasting* and *prophecy*?]

Silver, Signal and Noise, ch. 4

Week 6: Mysticism & Foreknowledge

Week of Feb 21

Module 6.1 Policing and Prosecuting Fortune-tellers

Skim <u>The Witches' Dream Book; and Fortune Teller</u> (New York: Henry J. Wheman, 1885). [Flip through the book, pausing to read sections that are of most interest to you. What are the different methods of

prediction described? How is this knowledge organized and/or systematized? How might a reader in 1885 have used this book?]

Evangeline Adams, The Law and Astrology (pamphlet) (New York: Schulte Press, n.d.) [Canvas]

David Allen Harvey, "Fortune-Tellers in the French Courts: Antidivination Prosecutions in the Nineteenth and Twentieth Centuries," *French Historical Studies* 28, no. 1 (2005): 131-157

Recommended:

Alana Piper, "Women's Work: The Professionalisation and Policing of Fortune-Telling in Australia," *Labour History* 108 (2015): 37-52

Shane White, "The Gold Diggers of 1833: African American Dreams, Fortune-Telling, Treasure-Seeking, and Policy in Antebellum New York City," Journal of Social History 47, no. 3 (2014): 673-695

Q. K. Philander Doesticks, P. B., *The Witches of New York* (New York: Rudd & Carleton, 1859), chs. 1, 6, 11, 12, 14, 18



Module 6.2 Spiritual Prophecies of the Past and Future

Wovoka's Message (1891)

Louis S. Warren, God's Red Son: The Ghost Dance Religion and the Making of Modern America (Basic Books, 2017), introduction

LaShawn Harris, "Dream Books, Crystal Balls, and 'Lucky Numbers': African American Female Mediums in Harlem, 1900-1930s," *Afro-Americans in New York Life and History* 35, no. 1 (2011): 1-30

UNIT 2: CAPITALISM, FORECASTING & RISK MANAGEMENT

Week 7: Navigating the "Economic Chance-World"

Week of Feb 28

Midterm exam due this week

Module 7.1 Reading the Market

W. Stanley Jevons, "Sun-Spots and Commercial Crises," Nature 19 (1879): 588-590

Caitlin Zaloom, "How to Read the Future: The Yield Curve, Affect, and Financial Prediction," *Public Culture* 21, no. 2 (2009): 245-68

Silver, Signal and Noise, ch. 11

Recommended: Samuel Benner, <u>Benner's Prophecies of Future Ups and Downs in Prices</u> (Cincinnati, 1876), pp. 7-30, 96-131 (Preface, Introduction, "Predictions," "Panic," "Theory," "Conclusion")

Module 7.2 Commodity Futures Trading and "Fictitious Dealings"

A Corner in Wheat (1909), dir. D. W. Griffith (14 min.)

Recommended:

Jonathan Ira Levy, "Contemplating Delivery: Futures Trading and the Problem of Commodity Exchange in the United States, 1875-1905," *American Historical Review* 111, no. 2 (2006): 307-355

William Cronon, "Pricing the Future: Grain" in *Nature's Metropolis: Chicago and the Great West* (W. W. Norton, 1991), pp. 97⁻¹⁴⁷

Donald MacKenzie, "A Material Political Economy: Automated Trading Desk and Price Prediction in High Frequency Trading," *Social Studies of Science* 47, no. 2 (2016): 172-194

Week 8: Professional Economic Forecasting

Week of Mar 7

Module 8.1 Economic Models and Metaphors

Mary S. Morgan, "What if?" Models, fact, and fiction in economics," Keynes Lecture in Economics, Journal of the British Academy 2 (2014): 231-268

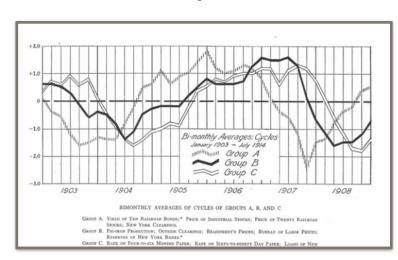
Walter A. Friedman, "A Selection of Early Forecasting & Business Charts" (2014)

Recommended: Donald MacKenzie, An Engine, Not a Camera: How Financial Models Shape Markets (MIT Press, 2006)

Module 8.2 Commercial and Government Economic Forecasting

Walter A. Friedman, "The Harvard Economic Service and the Problems of Forecasting," *History of Political Economy* 41 (2009): 57-88

Silver, Signal and Noise, ch. 1



SPRING RECESS

Week 9: Utopian & Dystopian Futures

Week of Mar 21

Module 9.1 Imagining Future Worlds

W. E. B. Du Bois, "The Comet," in Darkwater: Voices from within the Veil (Harcourt, Brace, 1920)

Selections from H. G. Wells, <u>Anticipations of the Reaction of Mechanical and Scientific Progress Upon Human Life</u> <u>and Thought</u> (Chapman & Hall, 1902)

Recommended:

Howard Segal, "The Technological Utopians," in Joseph J. Corn, ed., *Imagining Tomorrow: History, Technology, and the American Future* (MIT Press, 1988), pp. 119-136 [Canvas]

Martin Mahony, "Historical Geographies of the Future: Airships and the Making of Imperial Atmospheres," *Annals of the American Association of Geographers* 109, no. 4 (2019): 1279-1299

Lisa Messeri and Janet Vertesi, "The Greatest Missions Never Flown: Anticipatory Discourse and the 'Projectory' in Technological Communities," *Technology and Culture* 56, no. 1 (2015): 54-85

Module 9.2 Engineering Better Tomorrows

Robert Rydell, World of Fairs: The Century of Progress Expositions (Chicago: The University of Chicago Press, 1993), pp. 38-58 (ch. 2: "Fitter Families for Future Firesides': Eugenics Exhibitions Between the Wars") [Canvas]

Robert Rydell, World of Fairs: The Century of Progress Expositions (Chicago: University of Chicago Press, 1993), pp. 157-192 (ch. 6, "African Americans in the World of Tomorrow") [Canvas]

Recommended:

Matthew Frye Jacobson, *Barbarian Virtues: The United States Encounters Foreign Peoples at Home and Abroad*, 1876-1917 (New York: Hill and Wang, 2001), pp. 139-172 (ch. 4: "Theories of Development: Scholarly Disciplines and the Hierarchy of Peoples")

Folke T. Kihlstedt, "Utopia Realized: The World's Fairs of the 1930s," in Joseph J. Corn, ed., *Imagining Tomorrow: History, Technology, and the American Future* (MIT Press, 1988), pp. 97-118

UNIT 3: PREDICTION & GEOPOLITICS IN THE 20TH CENTURY

Week 10: Predictability during the Cold War

Week of Mar 28 Module 10.1 World War III

Selections from Collier's, October 27, 1951 ("Preview of the War We Do Not Want") [Canvas]

Recommended: Matthew Connelly et al., "General, I Have Fought Just as Many Nuclear Wars as You Have: Forecasts, Future Scenarios, and the Politics of Armageddon," *American Historical Review* 117, no. 5 (2012): 1431-1460

Module 10.2 Imagining and Controlling Future Scenarios

Olaf Helmer, "Analysis of the Future: The Delphi Method," RAND Paper (RAND Corporation: March 1967), pp. 1-11 [Canvas]

Eglė Rindzevičiūtė, "Toward a Joint Future beyond the Iron Curtain: East-West Politics of Global Modelling," in *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, ed. Jenny Andersson and Eglė Rindzevičiūtė (Routledge, 2015), pp. 115-143 [Canvas]

Week 11: Calculating & Computing Social & Economic Futures

Week of Apr 4 Module 11.1 Futurism and Futurology in the 1960s and 1970s

"The Futurists: Looking Toward A.D. 2000," Time Magazine, February 25, 1966 [Canvas]

Kaya Tolon, "Futures Studies: A New Social Science Rooted in Cold War Strategic Thinking," in *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature*, ed. Mark Solovey and Hamilton Cravens (Palgrave Macmillan, 2012), pp. 45-62 [Canvas]

Silver, Signal and Noise, ch. 9



Jeff Grischow and Holger Weiss, "Pan-Africanism, Socialism and the Future: Development Planning in Ghana, 1951-1966," in *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, ed. Jenny Andersson and Eglė Rindzevičiūtė (Routledge, 2015), pp. 218-240

Eden Medina, "Designing Freedom, Regulating a Nation: Socialist Cybernetics in Allende's Chile," Journal of Latin American Studies 38 (2006): 571-606

Recommended: Eden Medina, "Big Data Lessons from Our Cybernetic Past," presentation at Strata & Hadoop Big Data Conference, San Jose, 2015, YouTube

Week 12: Demographic & Climate Futures

Week of Apr 11

Module 12.1 Population Control in the 1960s and 1970s

Paul Ehrlich, The Population Bomb (1968; repr. Rivercity Press, 1975), pp. xi-25 [Canvas]

NPR Planet Money podcast, Episode 508: "A Bet on the Future of Humanity," January 8, 2014



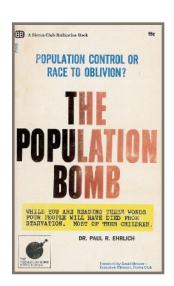
Matthew Connelly, "Controlling Passions," The Wilson Quarterly 32, no. 3 (Summer 2008): 60-66

Recommended:

Matthew Connelly, "Future Shock: The End of the World as They Knew It," in *The Shock of the Global: The 1970s in Perspective*, eds. Niall Ferguson, Charles Maier, Erez Manela, Daniel Sargent (Cambridge, MA: Harvard University Press, 2010), pp. 337-350 [Canvas]

Paul Warde and Sverker Sörlin, "Expertise for the Future: The Emergence of Environmental Prediction c. 1920-1970," in *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, ed. Jenny Andersson and Eglé Rindzevičiūtė (Routledge), pp. 38-62

Paul Sabin, *The Bet: Paul Ehrlich, Julian Simon, and Our Gamble over Earth's Future* (Yale University Press, 2013), introduction and ch. 5 ("Polarizing Politics") [Canvas]



Elodie Vielle Blanchard, "Technoscientific Cornucopian Futures versus Doomsday Futures: The World Models and The Limits to Growth," in *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, ed. Jenny Andersson and Eglė Rindzevičiūtė (Routledge), pp. 92-114 [Canvas]

Module 12.2 Imagining and Engineering Climate Futures

Naomi Oreskes and Erik M. Conway, *The Collapse of Western Civilization: A View from the Future* (Columbia UP, 2014)

James Rodger Fleming, Fixing the Sky: The Checkered History of Weather and Climate Control (New York: Columbia University Press, 2010), pp. 225-268 (ch. 8: "The Climate Engineers") [Canvas]

Recommended: Paul Edwards, "Modeling Wicked Problems," Anthropocene Campus, November 2014, YouTube (30 min.)

UNIT 4: BIG DATA, PREDICTIVE ANALYTICS & CALCULATING OUR FUTURES

Week 13: Speculation & Gambling

Week of Apr 18

Paper #2 due this week

Module 13.1 Speculating on Weather and Climate

Michael Specter, "Climate By Numbers," New Yorker, November 11, 2013

Recommended: Samuel Randalls, "Weather Profits: Weather Derivatives and the Commercialization of Meteorology," Social Studies of Science 40, no. 5 (2010): 705-730



Module 13.2 Place Your Bets!

NPR *Planet Money* podcast, <u>Episode 690: "All In,"</u> March 18, 2016

Natasha Dow Schüll, <u>"The Gaming of Chance:</u>
Online Poker Software and the Potentialization of <u>Uncertainty."</u> in *Modes of Uncertainty: Anthropological Observations*, ed. P. Rabinow & L. Samimian-Darash (University of Chicago Press, 2015), pp. 46-68

Week 14: Aggregating Individual Futures in the 21st Century

Week of Apr 25 Module 14.1 Predicting and Policing Human Behavior

Philip K. Dick, "The Minority Report," in *The Minority Report and Other Classic Stories* (Citadel, 2002), pp. 71-102 [Canvas]

Andrew Guthrie Ferguson, *The Rise of Big Data Policing: Surveillance, Race, and the Future of Law* (NYU Press, 2017), ch. 7 ("Black Data: Distortions of Race, Transparency, and Law") [Canvas]

Kevin Dupzyk, <u>"The Internet Knows What You Did Last Summer,"</u> Popular Mechanics, March 1, 2016, pp. 15-17

Module 14.2 Quantified Self Movement/Conclusions

Natasha Dow Schüll, "Self in the Loop: Bits, Patterns, and Pathways in the Quantified Self," in A Networked Self and Human Augmentics, Artifical Intelligence, Sentience, ed. Zizi Papacharissi (Routlege, 2019), pp. 25-35

Silver, Signal and Noise, chs. 2, 13, conclusion

This course will not have a traditional final exam. Your final exam grade will be based on your Canvas discussion posts for the Week 14 modules (1 paragraph each). This approach is designed to boost everyone's grade while not contributing to end-of-semester exam-related stress.

Final exam schedules: https://scheduling.rutgers.edu/scheduling/exam-scheduling/final-exam-scheduling/exam-scheduling/final-exam-scheduling/exam-scheduling/exam-scheduling/exam-scheduling/final-exam-scheduling/ex

Final exam policies: <a href="https://scheduling.rutgers.edu/scheduling/exam-scheduling/final-exam-schedulin