Modeling Political Decisions for Sustainability: The EU 2040 Climate Goal

Fall (Winter) Term 2025/26

Professor Detlef F. Sprinz, Ph.D.

Purpose and Contents

This seminar will introduce students to the Predictioneer's Game, an applied model of multi-party decision-making. Subsequently, students will apply their modeling skills to specific political decisions on sustainability. The domain of application for the decision forecasts will be potential use of high quality international credits to achieve the net 2040 greenhouse gas mitigation goal of the EU. The language of instruction is English.

Learning Goals

Knowledge & Understanding

- background on political decision-making in medium-large actor settings,
- understand the core inputs & outputs of a prediction model, and
- decision-making on EU climate policies, esp. carbon removals.

Applying, Analyzing & Evaluating

- undertake predictions of multi-actor negotiations for a hitherto unresolved challenge of sustainability policy,
- agree, among students and facilitated by the instructors, on standardized position and potential influence (input) scales as relevant to utilizing a policy prediction software, and
- research, execute, and evaluate your own simulation model runs.

Competences

- Students develop their own research strategy in the context of policy prediction tools, e.g., for subsequent use in their thesis as well as in a business and environmental NGO, or political context, and
- work individually as well as in groups on a diverse set of assignments.

Logistics

Time: → *Course Overview* (below)

Course website: Open.UP →https://openup.uni-

potsdam.de/course/view.php?id=659

(Non-University of Potsdam students need to register themselves with their *university* email)

Zoom: →Open.UP

Location: → *Course Overview for locations* (most sessions take place at Griebnitzsee, Building 6):

Please regularly check →Open.UP for additional announcements.

Prerequisites: Master, M.A., M.S., or doctoral student status, or special student status in Political Science, Public Administration, MAIB, MANIA, MPM, Sociology, Business Administration, Economics, and HPI; exceptions at the discretion of the instructor.

Course Registration: →https://puls.uni-potsdam.de, Course: 116647.

Students without access to PULS send a brief email to the instructor (→detlef.sprinz@uni-potsdam, include "MPD4S – W2025/26" in the subject line) and indicate (1) first & last name, (2) email (University of Potsdam email preferred), (4) field und semester of studies, (4) why they cannot access PULS, and (5) why they wish to take this course.

Deadline for Dropping the Course: 10 Nov. 2025

Credit Points: 6/7 or 9/10 (ECTS)

Capacity: 20 Contact Details:

detlef.sprinz@uni-potsdam.de (always include "MPD4S – W2025/26" in the subject line)

www.sprinz.org

Office Hours: by appointment (preferably: please inquire after class or during breaks)

Practicalities

This course requires usage of Open.UP (a version of Moodle) and Zoom for our remote communication and interaction. In addition, we may use other digital tools. We will use Open.UP for contents management (self-enrollment) and Zoom for video (as needed). You will need a computing device running Windows OS to run the software ("Predictioneer's Game") used for predicting negotiation outcomes.

Code of Conduct

If you are sick or have a communicable disease, incl. seasonal influenza, please stay at home and consult your medical doctor. If possible, connect by Zoom (if available). If you miss an assignment, you *must* provide a

medical doctor's certificate. Otherwise you receive zero points for the assignment.

All students are assumed to be familiar with and will abide by the rules of proper academic conduct as specified by the University of Potsdam (→https://www.uni-potsdam.de/de/cogsci-students/studienplanung/gute-wissenschaftlicher-praxis-plagiarismus, German; https://www.uni-potsdam.de/en/cogsci-students/organizing-your-studies/academic-code-of-conduct-plagiarism, English), and for courses offered jointly with other universities and academic programs, their rules apply in addition; by default, the strictest rule applies. You are expected to undertake all your individual assignments independently. For group assignments, resulting products shall be authored exclusively by all group members (with individual components clearly marked or joint authorship declared). Failure to comply with such rules may lead to the consequences stipulated in →https://www.uni-

potsdam.de/fileadmin/projects/ambek/Amtliche_Bekanntmachungen/2025/Ausgabe_04/ambek-2025-04-099-124.pdf (German) and —https://www.uni-

potsdam.de/fileadmin/projects/studium/docs/03_studium_konkret/07_rec htsgrundlagen/BAMAO_Lesefassung_EN.pdf (English) (§17).

Please consult →https://www.uni-potsdam.de/fileadmin/projects/wisofak/Dateien/Studium/Informationen_z um_Einsatz_von_Plagiatssoftware_20.11.2023.pdf in addition.

"A note on Artificial Intelligence (AI) tools: Inserting AI-generated text into an assignment without proper attribution is a violation of academic integrity, and using AI tools in a manner that was not authorized by your instructor may also be considered a breach of academic integrity" (https://catalog.yale.edu/undergraduate-regulations/regulations/academic-dishonesty/#:~:text=A%20note%20on%20Artificial%20Intelligence,a% 20breach%20of%20academic%20integrity, 09 Oct. 2025). Always specify the AI tool, the prompt, the URL, and the date of access (paraphrased from https://poorvucenter.yale.edu/AIguidance, 11 Oct. 2024, no longer accessible).

All (personal) information and material that you encounter in conjunction with this course, on \rightarrow Zoom, or on \rightarrow Open.UP shall be exclusively used for course-related purposes; they are not part of the public domain. As we will have guest speakers and an issue of current politics as the domain of application, "Chatham House Rules" apply:

"When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed."

(https://www.chathamhouse.org/about-us/chatham-house-rule, last accessed: 09 Oct. 2025).

Whenever you use outside services, you agree to abide by their respective End User License Agreement or equivalent. You have to read the EULA (End User License Agreement) of the Predictioneer's Game software, and you accept it automatically when submitting the simulation paper. You also automatically accept all rules of academic conduct for the entire course by submitting your first written assignment, whether this is a paper, presentation file, written test, quiz, or similar.

During our seminar sessions, I expect you to concentrate solely on this course, not other activities.

Students are expected to attend all sessions. If you fall ill, please stay at home and seek medical advice. In case you cannot submit assignments due to medical reasons, you *must* submit an appropriate medical certificate.

In case you request accommodations ("Nachteilsausgleich"), please inform the instructors to this effect and provide the necessary documentation by 06 Nov. 2025. By default, I assume you request 6/7 ECTS. In case you wish to receive 9/10 ECTS, you must inform the instructor by 06 Nov. 2025.

In case observation of religious obligations interferes with academic deadlines, please notify the instructor well ahead of the deadlines.

For proper citation, please consult →https://poorvucenter.yale.edu/using-sources (English), →https://www.uni-potsdam.de/de/cogsci-students/studienplanung/gute-wissenschaftlicher-praxis-plagiarismus (German).

Course Requirements and Grading

Students are expected to attend *all* classes and read *all* required readings *before* class so as to allow for informed discussions.

This course comprises a portfolio of assignments. Please inform the instructor how many ECTS you wish to receive by 06 Nov. 2025.

Requirements	Weight
Fulfill tasks and tests on Open.UP	20%
(Individual) actor paper	20%
(Individual) actor paper presentation	10%
(Group) simulation paper	35%
(Group) simulation paper presentation	15%

Course Overview¹

Module #	Date & Time	Topic	Learning goals students	Homework (in advance of the class meetings) &
1	16 Oct. 2025, 13:15- 14:45h, 3.06.S19	Course Overview	Understand the goals and topic of the course	Read detailed syllabus & admission policy
				Students prepare course-related questions
2	23 Oct. 2025, 13:15- 14:45h, via Zoom	The Predictioneer's Game: Logic & Overview	Basic understanding of overall functions and functioning of the Predictioneer's Game	Familiarize yourself with Open.UP Watch a set of videos by Bruce Bueno de Mesquita (BdM) Readings according to syllabus
3	30 Oct. 2025, 13:15- 14:45h, via Zoom	The Predictioneer's Game: Input Data	Detailed understanding of the input data (conceptual)	Watch a set of videos by BdM Readings according to syllabus
4	06 Nov. 2025, 13:15- 14:30h, 3.06.S19	The Predictioneer's Game: Output Data	Detailed understanding of the output files (conceptual) Interpreting outputs Learn veto rule	Watch a set of videos by BdM Readings according to syllabus Read centrally provided output files
optional	06 Nov. 2025, 15:00- 18:00h	attend 10. Jahreskonferenz der Stiftung KlimaWirtschaft, Berlin	Register individually at →klimawirtschaft.org	
5	13 Nov. 2025, 13:45- 14:45h,	Guest Lecture: Dr. Artur Runge-Metzger (PIK/MCC):	Overview of the EU regulatory context for the EU 2040 climate goals	Readings according to syllabus

 $^{^1}$ The schedule is indicative and subject to short-term changes. Check the course site on \rightarrow Open.UP for updates and announcements as the instructor may include additional online events or change course times in line with the availability of guest speakers.

	3.06.S19	Enshrining the EU 2040 Goal		
6A	13 Nov. 2025, 15:00- 16:15h, 3.06.S19	Q&A on the Predictioneer's Game (Modules 2-4)	Improve model understanding and resolve open issues	Post your advance questions to the forum on →Open.UP
6B	13 Nov. 2025, 16:30- 16:45h, 3.06.S19	Quiz (→Open.UP)		Bring proper digital devices with you to class and arrive early
	20 Nov. 2025	Reading Week, no instruction		
7	27 Nov. 2025, 13:15- 14:45h, 3.06.S19	The Predictioneer's Game: Running the Software Instructor:	Get Predictioneer's Game running	Install Predictioneer's Game prior to class Submit Predictioneer's Game input file to →Open.UP Readings according to syllabus
8	27 Nov. 2025, 15:00- 16:30h, 3.06.S19	Guest Speaker		Readings according to syllabus
9	04 Dec. 2025, 13:15- 14:45h, 3.06.S15	Guest Lecture		Readings according to syllabus
10	04 Dec. 2025, 15:00- 16:30h, 3.06.S15	Developing the Prediction Scales	Interactive development of the input scales, esp. position scale (& potential influence)	Readings according to syllabus Students submit initial ideas on the position & influence scales to →Open.UP
11	11 Dec. 2025, 13:15- 14:45h, 3.06.S15	Guest Lecture		Readings according to syllabus
12	11 Dec. 2025,	Guest Lecture		Readings according to

	15:00- 16:30h, 3.06.S15			syllabus
13 & 14	18 Dec. 2024, 13:15- 16:30h, 3.06.S15	Presentations: Individual Actor Papers I & II		Submission of actor papers and presentation files to →Open.UP by 18 Dec. 2024 (see Assignment #1 for details)
15	08 Jan. 2026, 13:15- 15:00h, online	Workshop: Q&A on Group Projects	Consultations by Simulation Group with the Instructor	Submit general and project- specific questions →Open.UP
16 & 17	15 Jan. 2026, place t.b.d., potentially at PIK- Potsdam Institute for Climate Impact Research	Presentations: Individual & Group Predictions	Student Presentations	Submission of presentation files to →Open.UP (see Assignment #2 for details)
18	15 Jan. 2026, 15:30- 16:00h	Course Review		
	29 Jan. 2026			Assignment #2 Papers Due (see Assignment #2 for details)

Additional modules may be scheduled at the discretion of the instructor. Please check announcements on \rightarrow Open.UP for updates.

Textbooks

Bueno de Mesquita, Bruce. 2009. *The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future*. New York: Random House

Helpful background readings on EU climate policy include Debelke, Jos. ed. 2024. *Delivering a Climate Neutral Europe*. London: Routledge, doi.org/10.4324/9781003493730

Rayner, Tim et al. 2023. *Handbook on European Union Climate Change Policy and Politics*, Cheltenham: Edward Elgar Publishing, doi.org/10.4337/9781789906981

All other readings can be found on $\rightarrow Open.UP$.

Assignments

All Assignments

Assignments will be posted to $\rightarrow Open.UP$ well ahead of the deadline. Submission deadlines are indicated in the $\rightarrow Assignments$.

Read the instructions carefully! All papers include your student ID number(s), assignment number (see overview), and word count on the first page. At a minimum, leave one inch margins from all four edges of A4-sized sheets. Footnotes shall be kept to a minimum. All text is 1.5-spaced, 11-12 point font (except for tables and graphs due to formatting). Paper length will be strictly enforced (the word count includes literally everything). Papers exceeding the word count by 10% or more will receive zero points. Papers shall be submitted – both in Word (check your word count!) **and** PDF format – via $\rightarrow Open.UP$ by the due date and time ($\rightarrow Assignment$). Extensions will be granted only under extraordinary circumstances, following timely written petition to the instructor.

In case of group assignments, all author ID numbers have to be listed, including a short description who contributed what (or that everyone contributed to everything *equally*).

In case you cannot submit assignments due to medical reasons, you must submit a medical doctor's certificate to the instructor.

The allocation of individual students to actor papers and to simulation groups is at the discretion of the instructor.

Assignments will be posted to $\rightarrow Open.UP$ and are outlined below.

Actor and Simulation Papers & Presentations

Actor papers will be up to 1,250 words in length, simulation papers will be up to 2,500 words in length per group member (for 9-10 ECTS: assignment with a maximum of 5,000 words per student). Details on the paper format and the submission procedure will be provided in the formal assignments. All papers and presentation files are due the day prior to the presentation + Q&A session in class. Papers and presentation files are submitted via —Open.UP. Papers have to include student IDs and a brief description who did what (the latter refers to group papers only), the topic, and the word count on the cover page.

We will elaborate the relevant position scale for the prediction paper (Assignment #2) in class (Module 10), using working groups.

For the actor papers, please provide a brief historical overview of the actor, its central positions over time on the particular issue under investigation, and score the actor with respect to potential influence, position, salience, flexibility, and veto status (as introduced in Modules 2-4). Each of these scores has to be justified and sources fully referenced. Your presentations will be subject to Q&A by your peers (Modules 13 & 14)

For the simulation paper, you will have to determine which actors to include (beyond the actors already covered by actor papers), potentially revise the scores offered in individual actor papers, and devise a strategy for employing the Predictioneer's Game, including robustness checks (variations of the input structure, e.g., on parameter values where point values cannot be reliably ascertained). Please appendix the input file(s) for the simulations as .txt file(s) and provide full references for all sources. The simulation papers will be subject to Q&A by your peers (Module 16 & 17).

Modules

Module 1: Course Overview

Course Overview

Module 2: The Predictioneer's Game: Logic & Overview

Bueno de Mesquita, Bruce. 2009. *The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future*. New York: Random House, ch. 3

Bueno de Mesquita, Bruce. 2010. Judging Judgment. *Critical Review* 22 (4):355-388. doi: 10.1080/08913811.2010.541686

Sprinz, Detlef F., Bruce Bueno de Mesquita, Steffen Kallbekken, Frans Stokman, Håkon Sælen, and Robert Thomson. 2016. Predicting Paris: Multi-Method Approaches to Forecast the Outcomes of Global Climate Negotiations. *Politics and Governance* 4 (3):172-187. doi: 10.17645/pag.v4i3.654

Watch instructional video clips on →Open.UP

Module 3: The Predictioneer's Game: Input Data

- Bueno de Mesquita, Bruce. 2009. *The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future.* New York: Random House, ch. 4
- Bueno de Mesquita, Bruce. 2011. A New Model for Predicting Policy Choices. Conflict Management and Peace Science 28 (1):65-87. doi: 10.1177/0738894210388127
- Sprinz, Detlef F., Tabea V. Schaefers, Freya Lenk, and Maximilian Krott. 2024. Forecasting Forest-Related Political Decisions in a Climate-Constrained World The Remuneration of Forest Ecosystem Services in Germany. *Forest Policy and Economics* 169:103231. https://doi.org/10.1016/j.forpol.2024.103231

Watch instructional video clips on →Open.UP

Module 4: The Predictioneer's Game: Output Data

Sprinz, Detlef F., and Bruce Bueno de Mesquita. 2015. Predicting Paris: Forecasting the Outcomes of UNFCCC COP-21 With the Predictioneer's Game. Potsdam and New York City: PIK - Potsdam Institute for Climate Impact Research and New York University, doi: 10.13140/RG.2.1.3722.1840

Read output files for Module 4 (\rightarrow Open.UP). Watch instructional video clips on \rightarrow Open.UP

Module 5: Guest Lecture: Dr. Artur Runge-Metzger (PIK/MCC): Enshrining the EU 2040 Goal

t.b.d.

Module 6A: Q&A on the Predictioneer's Game (Modules 2-4)

Post your advance questions to the forum on \rightarrow Open.UP.

Module 6B: Quiz (covering Modules 2-4)

In-Class Quiz

Note: Please bring a laptop or similar device with you for the in-class test. The electronic quiz on the Predictioneer's Game in Module 6B can only be accessed after having watched *all* audio and video files provided in preparation of Modules 2- 4. Please be aware and prepare accordingly in order to avoid any technical issues when the quiz is taken in-class.

Module 7: The Predictioneer's Game: Running the Software

Purchase or get assigned a license, download and install the Predictioneer's Game. Install and read all information, incl. "Excel Tools," "Sample Test Sets," "User Guide,", FAQ, and the EULA to be confirmed: The Dean's Office has agreed to the purchase of a limited number of licenses that will be shared among students.

Prepare an input file for the Predictioneer's Game based on Bueno de Mesquita, Bruce. 2009. The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future. New York: Random House, 217 and upload it to →Open.UP.

Read

Bueno de Mesquita, Bruce. n.d. The Predictioneer's Game© Basic Software
Training Manual. Retrieved from The Predictioneer's Game (Software)
Guide to Downloading and Running the Predictioneer's Software →Open.UP
Guide to Organize the Excel Spreadsheets →Open.UP

Module 8: Guest Lecture: t.b.d

t.b.d.

Module 9: Guest Lecture: t.b.d

t.b.d.

Module 10: Developing the Prediction Scales

Students submit initial ideas on the position & potential influence scales to \rightarrow Open.UP.

Bueno de Mesquita, Bruce. 2009. *The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future.* New York: Random House, ch. 5.

Watch instructional video clips on →Open.UP

Module 11: Guest Lecture: t.b.d

t.b.d.

Module 12: Guest Lecture: t.b.d

t.b.d.

Modules 13 & 14: Presentations: Individual Actor Papers

Presentations: Individual Actor Papers

Please read all presentation files on \rightarrow Open.UP.

Module 15: Workshop: Q&A on Group Projects

Details to be announced on \rightarrow Open.UP

Modules 16 & 17: Presentations: Individual & Group Prediction Papers

Presentation: Group or Individual Prediction Papers

Please read all presentation file on \rightarrow Open.UP.

Module 18: Course Review