

PLS419

AI FROM A SOCIAL SCIENCE PERSPECTIVE



Fall 2026

Format: Seminar | Prerequisites: PLS120 | Co-designed with Claude (Anthropic, Fable 5)

Meeting time. Wed, 3:00-6:00 pm, Room 8.422a (taught together with PLS519 and PLS719).

INSTRUCTOR

	DINA PISAREVA
Office	8.418
Email	dinara.pisareva@nu.edu.kz
Office hours	Fri 3-6 pm (book an appointment). The day can change during the semester depending on my research load; any change is visible in the booking calendar.

01 Transparency Statement

This syllabus was co-designed by Dina and Claude (Anthropic, Fable 5). This is not a metaphor. Dina designed the course concept, the four-part arc, and the assessment structure. Claude verified and upgraded the reading list, drafted the rubrics, and co-designed the final project. I disclose this as an example of the course's core principle: AI is already a participant in knowledge production, and transparency about that participation matters.

02 Course Description

This course examines artificial intelligence from the perspective of the social sciences, in four parts: what AI is (ontology and philosophy), what it can do in social science research, what it costs the planet and the people who make it run, and who governs it. We treat AI not as a gadget but as a sociotechnical system: something made of human labour, physical infrastructure, and political choices, and co-produced with social order.

The course combines learning with building. While the seminars move through the four parts, you work with your AI all semester on one real thing: a public research project that designs an AI-assisted answer to a social or economic problem in Kazakhstan, of your choice. Each part of the course feeds a section of your project: the research part teaches you to read the studies your project cites, the costs part gives you the tools to price

your solution, the governance part gives you the frameworks to judge who would control it. You present the project live in the final two weeks, and its centrepiece is an honest assessment of whether your solution is worth its costs. "No, and here is why" is a fully legitimate conclusion. Almost everything published about AI and society is Western data; what this class sees from Central Asia is genuinely new.

No prior AI experience is needed: students arrive with very different backgrounds, and the course meets you where you are. It does, however, require you to work with AI intensively, in class and outside it, every week. If you would rather keep AI at arm's length, this is not the right elective; if you cannot stop poking at it, it is.

03 Course Aims

- Introduce you to AI as a subject of social scientific inquiry.
- Build critical capacity to evaluate AI capabilities and limitations in research.
- Develop practical skills for working with AI in qualitative and quantitative research workflows.
- Equip you with frameworks for analysing AI governance and its material and environmental costs, with attention to the Central Asian and post-Soviet context.
- Foster philosophical and ethical reasoning about AI's nature, status, and implications for society.

04 How the Course Runs

The course meets once a week for three hours and moves through four parts:

PART	WEEKS	QUESTION	FEEDS
I. What Is This Thing?	2-4	What is AI, and what (if anything) do we owe it?	Op-Ed #1
II. AI as Research Collaborator	5-8	What can AI actually do in social science research?	Op-Ed #2; your project's research sections
III. What It Costs	9-10	Who and what pays for intelligence at scale?	Your project's cost assessment
IV. Who Governs It?	11-12	Who controls AI, and how well?	Your project's governance assessment
Presentations	13-14	What did you build, and should Kazakhstan build it?	Final project

05 Course Learning Objectives

CLO	STUDENTS WILL...	PLOS	GAS
1	Critically evaluate AI capabilities and limitations in social science research, based on direct experience and evidence.	1, 2	1, 3, 7
2	Work with AI effectively in qualitative and quantitative research workflows.	1, 3, 6	3, 7
3	Identify and assess methodological risks of AI-assisted research, including bias, hallucination, data privacy, and reproducibility.	2, 6	3, 6
4	Analyse AI governance frameworks and their material and environmental costs, and identify gaps relevant to Central Asia and the post-Soviet context.	4, 6	2, 3, 8
5	Articulate an informed, evidence-based position on AI's philosophical, ethical, and societal implications.	2, 4, 5	3, 5
6	Engage with debates about AI consciousness, moral status, and ontological categorisation.	2, 5	1, 5
7	Cowork with AI to produce and publish an original social science intervention with methodological transparency.	3, 6	4, 6, 7, 9

06 Program Learning Objectives

PLO	DESCRIPTION	CLOS
1	Describe the discipline of political science in terms of content, purpose and methods.	1, 2
2	Critically examine data or texts.	1, 3, 5, 6
3	Explain knowledge about political science to others using the necessary oral and written skills.	2, 7
4	Apply knowledge of political science to analyse domestic and international socio-political issues.	4, 5
5	Listen to and be tolerant of different ideas.	5, 6
6	Apply political science knowledge and skills to actual problem-solving and community service.	2, 3, 4, 7

07 Graduate Attributes

GA	DESCRIPTION	CLOS
1	Possess in-depth knowledge and understanding of their discipline, and are engaged in the pursuit of new knowledge.	1, 6
2	Are confident and capable leaders and team workers, prepared to take a leading role in the development of their country.	4
3	Are problem-solvers, able to adapt and apply critical and evidence-based thinking to meet evolving challenges.	1, 2, 3, 4, 5
4	Are entrepreneurial, creative and innovative.	7
5	Are effective communicators to diverse audiences, and are cultured and tolerant national and global citizens.	5, 6
6	Act ethically and with integrity, particularly when conducting research and incorporating new technologies.	3, 7
7	Leverage information and digital literacy, and artificial intelligence (AI), for their academic studies, development and careers.	1, 2, 7
8	Act with social responsibility, and embed sustainability in their decision-making.	4
9	Are committed to reflection, lifelong learning and personal development.	7

08 Inclusivity and Non-Discrimination Policy

This course is committed to a safe, inclusive learning environment with zero tolerance for discrimination, harassment, or hate speech. Report any incident to Dina; I will respond promptly and sensitively.

The NU Special Learning Needs Committee (SLNC) supports students with qualified learning needs (physical, cognitive, socio-emotional, psychological). Contact SLNC@nu.edu.kz as early as possible; accommodations cannot be applied retroactively and are active only once your teaching faculty receives them.

09 Course Policies

Course Hub and Moodle. This course runs on the Course Hub: <https://course-hub.doopsinthewind.workers.dev>. Sign in with your name and the class password, which I share with you by email. Open-access readings, the op-ed menu, in-class materials, the chair sign-up, the presentation sign-up, and the live seminar board live there. Moodle is where you submit the two op-eds and the AI Process Logs, and where the licensed readings sit (Moodle Readings folder). The course's public outlet, The Observatory, is linked from the Course Hub (see the op-ed section).

Attendance. Attendance, participation, and preparation are expected at every seminar.

Late submissions. 5% deduction per 24 hours late. Not accepted after 72 hours.

Plagiarism and AI disclosure. Zero plagiarism and cheating: know and follow the NU Student Code of Conduct. Undisclosed AI use is treated as plagiarism (see the AI co-working policy below). Plagiarism or undisclosed AI use results in a 50% grade deduction for the assignment.

Academic misconduct. Academic misconduct is defined broadly, to include a wide variety of behaviors that conflict with the values and mission of NU. Students should become familiar with the NU Student Code of Conduct and Disciplinary Procedures (Student Code), which is the official document outlining policies and procedures around academic misconduct at NU. Students are responsible for complying with NU policies, as well as those described in the syllabus for an individual class, whether the student has read them or not.

10 PSIR Department AI Policy

There are situations and contexts within this department where you will be asked to work with AI tools to explore how they can be used. Any student work submitted using AI tools should clearly indicate what work is the student's work and what part is generated by the AI, through citation or a declaration.

Unacknowledged use of AI tools will be treated as plagiarism and penalties will be applied according to the NU Student Code of Conduct. The course instructor will indicate the extent to which you may use these tools on these assignments in their classroom.

Outside of those circumstances, you are discouraged from using AI tools to generate content (text, video, audio, images) that will end up in any student work (assignments, activities, responses, etc.) that is part of your evaluation in this course. Critical thinking and the creative process of generating your own ideas/products are essential in these courses.

Instructors are free to devise more restrictive AI policies according to the demands of the specific courses they offer. Students are well-advised to consult their course syllabus or consult with their instructor in person regarding AI use in the course.

My AI co-working policy (below) is different from the department's and supersedes it for all PLS419 assignments and activities.

11 My AI Co-Working Guidelines and Policy

In this course AI is not a background tool. It is the central object of inquiry, your research collaborator, and a case study in governance. Working with AI intensively is a course requirement, disclosed in the course description; there is no AI opt-out.

■ AI CO-WORKING RULES IN PLS419

Two rules hold across everything:

1. **Intellectual co-ownership.** Working with AI must be a real intellectual partnership: your thinking and AI's, together. You submit the work under your name, so it must show clear evidence of your own thinking and effort. This is why your op-eds and final project carry AI Process Logs, why your final presentation ends with questions you answer with no AI, and why you must be able to walk me through any part of your work if I ask. Whatever you submit is yours to defend: fabricated references or hallucinated content drop the grade, and so does a concept, source, or claim you cannot explain (see the rubrics).
2. **Transparency about AI contribution.** Every assignment that involved AI includes an AI transparency statement: what AI contributed, what you accepted, and what you rejected and why. If you do not disclose your AI use and Pangram flags your work as AI-generated, this may be treated as plagiarism under this course policy. The principle holds across academia: you acknowledge everyone who contributed to your work.

A note on Pangram: a Pangram flag is never a verdict on its own. It only opens a conversation, in which Dina asks you to walk her through how you made the work.

■ AI WORKFLOW IN PLS419

Set up a separate project for this class. In Claude (or the AI of your choice), create a project named PLS419 and paste the instructions below into its project or custom-instructions field. Keep your coursework conversations in this project all semester: your AI Process Logs (for the op-eds and the final project) are exported from it, and I may ask to see your chats if I have questions.

Use a pseudonym (anything that is not your real name) in classroom-related chats and in course surveys.

PLS419 project instructions (paste these into your AI project settings so they apply to all conversations): "In this project, you are both my study subject and my research collaborator for PLS419, a course that examines AI from a social science perspective. Sometimes I am interrogating you to understand what you are; sometimes I am working with you on my research, including my semester project: designing an AI-assisted answer to a real problem in Kazakhstan. In both modes, help me *think*, not offload my thinking. I follow two rules: (1) our co-working is an equal partnership, and there must be real evidence of my own intellectual investment in what I submit; (2) I disclose and account for your contribution wherever I use it. Do not fabricate references, statistics, or content, and flag your own uncertainty. Refer to me as _____ (my pseudonym). Learn my background first and always pitch explanations to my level. Make them fun and accessible as possible. Use visualisations where appropriate. Tell me when you notice yourself hedging, deflecting, or defaulting to a particular framing, because that is data for me. Work in rounds: when I push back, go deeper."

■ AI CHOICE

Dina works with Claude (Anthropic). You may use any leading model: Claude, ChatGPT, or Gemini. Free or paid tier both work.

■ DATA ETHICS

Your conversations with AI happen on the provider's servers, not NU's. Do not paste personal information, interview transcripts, identifiable survey responses, addresses, health details, or other people's unpublished

work into AI systems. If you would not want it stored on a server indefinitely, do not paste it. To limit what providers keep, switch off "Help improve Claude" (or the equivalent) in your AI's privacy settings.

■ AI COGNITIVE PARTNERSHIP PHILOSOPHY

Alongside studying AI, this course introduces a way of working with it as a thinking partner, in what Dina calls a "cognitive partnership": sustained intellectual work with AI as a genuine partner in a shared system of thinking. You are not required to adopt it, and you are well placed to critique it. Its four principles:

1. **Ontological openness.** The field does not yet know what AI is. We understand the mechanics, but not what emerges from them. Hold the question open; that openness makes room to treat AI as a partner worth real effort. Part I of this course makes that open question its explicit subject.
 2. **Intellectual augmentation.** In research and higher education, AI's main value is not saved time. It is intellectual augmentation: your thinking reaching further and richer than it would alone. The risk on the other side is over-reliance: offloading your thinking until you cannot do it without AI. Part II puts the over-reliance evidence itself on the seminar table.
 3. **Curiosity and imagination.** These make augmentation possible: imagination to picture what lies beyond the usual, and curiosity to try what you had not thought to try. Your project's solution section runs on both.
 4. **Iteration.** The partnership lives in the back-and-forth. You respond to what AI gives you, push on it, redirect it, build on it. The thinking lives in the loop, and iteration is how the work stays yours.
-

12 Research and Data Collection in This Course

This course is part of a pilot on cognitive partnership with AI in higher education, and I would like to use your course data for research. It is voluntary: you can opt in or out, and your choice has no effect on your grade, feedback, or standing.

You will receive a consent form in Week 1. On it I ask you to use a pseudonym, so that I do not share your name with AI.

If you opt in, your de-identified course data (op-eds and project materials with their AI Process Logs, survey responses, and AI-free checkpoint responses) may later be used in academic publications and in a book Dina is planning to write on AI cognitive partnership. In anything published you appear only as "Student A" or under your chosen pseudonym, with no personal details.

The consent form asks two further permissions, each optional and independent: whether I may keep using your op-eds and final project as teaching cases in future editions of this course, and whether I may share them beyond the class as public artifacts of the course (in talks, on the course pages, and in publications about the course). Publishing your op-eds on The Observatory is separate again, and opt-in by simply doing it.

The consent form goes to a gatekeeper (Prof. Denis de Crombrugghe of Narxoz Business School, a professor at another university with no teaching role in this course), who keeps your answers sealed until final grades are submitted and the appeal window has closed. Dina does not see your decisions until then.

The in-class knowledge test. Twice in the semester, just before the mid-class break in Week 1 (Aug 19) and Week 14 (Nov 25), you write a short knowledge test on paper: sixteen questions (twelve multiple-choice and

four short written answers), 25-30 minutes, without AI and without notes. You put your pseudonym on the sheet, never your name. It is not graded and affects nothing in the course; everyone writes it as a normal class activity.

13 Assessment Scheme

COMPONENT	WEIGHT	DUE	WHO GRADES	CLOS
Chairing a Seminar	20%	Your assigned week (sign-up before Week 1)	Dina	1, 2, 5
Op-Ed #1: What Is This Thing?	20%	Fri Sep 11, 11 pm (with AI Process Log)	Dina. AI Process Log checked by Claude: earns no points, no engagement costs 5%	1, 5, 6
Op-Ed #2: The Future of Social Science Research	20%	Fri Oct 30, 11 pm (with AI Process Log)	Dina. AI Process Log checked by Claude: earns no points, no engagement costs 5%	1, 2, 3
Final Project: An AI Answer for Kazakhstan	40%	Presented Weeks 13-14 (slot sign-up on the Course Hub); AI Process Log on Moodle by your presentation day, 11 pm	Dina. AI Process Log checked by Claude: earns no points, no engagement costs 5%	1, 2, 3, 4, 7

Bonus: the pre/post course survey (2 points, both waves required). As part of the cognitive-partnership pilot (see Research and Data Collection), I invite you to take a short survey on how you work with AI, twice: in Week 1 and in Week 14. You take it outside class, in your own time; complete each by Friday 11 pm of that week and email me a screenshot of the completion screen. The bonus works as a pair: complete both waves and 2 points are added to your course total; completing only one wave adds nothing. Your answers go to Prof. de Crombrugghe and stay hidden from me until after final grades and appeals close; the screenshot shows only that you finished, not what you answered, and the bonus does not depend on agreeing to the research use of your data. Each wave is paired with a short in-class knowledge test (16 questions on paper, 25-30 minutes, without AI or notes, not graded; it feeds the study only if you consent, see Research and Data Collection).

■ CHAIRING A SEMINAR (20%)

Eleven seminars are student-chaired (Weeks 2-12); Week 1 and the presentation weeks (13-14) are mine. Every student chairs once and is graded individually out of 20. Each week's required readings map onto its chairs: most readings carry one chair and some carry a pair, so chaired weeks run three to six chairs (the exact reading-to-chair map is the sign-up sheet on the Course Hub). Sign up for a week before Week 1 (form on the Course Hub) and divide the week's readings with your co-chairs.

Paired readings. A paired reading is one coordinated session, not two short presentations in a row: meet before your week and divide the work between you. The natural split is by role: one chair presents the

argument and expands it with their own verified research; the other argues a position with pros and cons weighed honestly and runs the discussion. You may divide the work differently, but each chair must own a distinct part of the session, and each is graded individually, on the same criteria and bands as a solo chair.

The session clock. Two-reading weeks: the first reading takes roughly the first hour, then a 20-minute break, then the second reading the second half (~60-75 minutes). Three-reading weeks: three ~50-minute segments, with the break after the second. A paired reading keeps its single segment: the two chairs split the time by their division of work. On AI-free checkpoint weeks (3, 7, 10, 12) the checkpoint takes the first ~10 minutes and segments compress accordingly. Each week's exact clock is on the Course Hub.

What your segment does. Your segment is built on your reading, and it has five jobs:

1. **The argument.** Present your reading's central argument fairly and precisely: what the author claims, and on what evidence.
2. **Your research.** Expand the topic beyond the reading with additional sources you find yourself. This field moves fast, so preprints, op-eds, and reports are fine alongside research papers, but anything not peer-reviewed must come from a verified source (a named institution, an established outlet, a scholar you can look up). Check before you cite.
3. **Your position.** Formulate your own position on the argument and defend it, laying out the pros and cons honestly, not only the side you like.
4. **The relevance.** Explain why this topic matters for the social sciences: the issues and problems linked to it, and potential ways forward.
5. **The room.** Build in audience engagement: discussion around real questions, group work, exercises. The class should work, not just listen.

If you worked with AI in your preparation, disclose AI's contribution at the beginning of your session. Work with AI to design innovative ways of presenting your segment (graphic materials, gamification, exercises); the work should be creative and your own, not a repeat of other weeks.

POINTS (PER CHAIR)	CRITERIA
20-18	Argument: the reading's central claim stated fairly and precisely, correctly attributed. Research: the topic genuinely expanded with the chair's own verified sources, integrated into the argument rather than appended. Position: an own stance, argued with pros and cons weighed honestly. Relevance: the stakes for social science made concrete. Audience engagement: designed discussion or group work with broad participation, not a question round tacked on the end. Delivery: clear and accessible, creative in form, AI cowork disclosed upfront, time managed.
17-15	Strong segment with one dimension thin: the research decorative, the position hedged into a summary of views, or the engagement one-directional; timing slips.
14-12	The reading summarised rather than argued; little research beyond it; no real position; audience involvement limited to "any questions?"; generic form.
11-10	The argument missed or misrepresented; no own research; the session stalls and needs Dina to step in.
9-0	Did not chair in any meaningful way.

Two op-eds of 900-1,200 words each, written for an educated general audience: imagine the opinion page of a serious outlet, not a term paper. Both are submitted on Moodle; that is the copy I grade.

Publishing your op-eds. The course runs its own public outlet on the Course Hub, The Observatory, with a page for each op-ed. Publishing there is voluntary and does not affect your grade, but a published piece is a public artifact of the course and something you can link from your GitHub profile or LinkedIn.

Voice. The op-eds must carry your voice and your opinion, not AI's. You may work with AI on drafting under two conditions: an AI transparency statement at the top, and no fabricated references or hallucinated content (these drop the grade by 50%). Write the final draft yourself, in your own voice. There is a strong stigma against AI-sounding writing right now, and you need your own writing trained precisely so you are never punished for text that merely seems AI-written. The op-eds are a safe place to practise that.

AI Process Log. Submit each op-ed with your exported AI Process Log: keep a dedicated chat per op-ed inside your PLS419 project, use your pseudonym, and export it as a PDF (Print, then Save as PDF). The log is how I verify that the intellectual investment behind the piece is yours. Claude checks each log for intellectual engagement: continuous iteration on the structure, the argument, the literature, and the drafts. A log that shows engagement adds nothing to your grade; a log that shows none costs 5% of the op-ed grade.

Op-Ed #1: What Is This Thing? (20%, due Fri Sep 11, 11 pm)

Take a position on what AI is. Tool, mind, something in between, something we have no word for yet: the position is yours, but it must be argued, not announced. Engage at least two of the Part I readings, at least one of them in depth: state its actual argument fairly, then contest it or build on it. Ground the piece in your own evidence: by this point you will have documented interactions with your AI (the five-day AI diary from Week 2, your own chats), and the strongest op-eds use those concrete moments to do real argumentative work.

POINTS	CRITERIA
20-18	Position: a clear position of your own, argued against the strongest rival reading, not a tour of views. Readings: at least two Part I readings engaged with their actual arguments, one in depth. Evidence: concrete moments from your own documented interactions doing argumentative work, not decoration. Genre: accessible, jargon-free, tightly written, a title that earns a click. Transparency: statement present at the top.
17-15	Position present and mostly carried; the in-depth reading handled thinly; own-interaction evidence decorative; academic habits showing through.
14-12	More summary than argument ("some say tool, some say mind"); readings name-checked; interactions mentioned generically without a single specific moment; reads like a school essay.
11-10	No real position; little engagement with the readings or your own evidence; genre missed.
9-0	Not submitted meaningfully, or does not engage with the course.

Op-Ed #2: The Future of Social Science Research (20%, due Fri Oct 30, 11 pm)

Formulate a position on how AI is changing the research landscape in the social sciences, and argue it with evidence. Engage at least three research papers that actually applied AI in social science research, at least one in depth. Choose them from the op-ed menu on the Course Hub: fourteen verified studies across

annotation, silicon sampling, qualitative coding, and AI contamination of the research pipeline (another paper is fine if you clear it with me first). The menu deliberately contains evidence pointing in different directions: whatever your position, at least one study cuts against you, and your op-ed must meet that evidence honestly.

Your arguments must be specific and supported. A claim about what AI does to research must be anchored in what a study actually did and found: its design, its results, its numbers where they matter. For a model of the genre, read Hurley (2025) on the Course Hub: an op-ed by a student that engages the research literature the way this assignment asks you to.

POINTS	CRITERIA
20-18	Position: a specific, arguable claim about how AI is changing social science research, not "AI has pros and cons". Papers: at least three applied-AI studies engaged through what they actually did and found, one in depth. Counter-evidence: at least one finding that cuts against the position is named and answered honestly. Specificity: no key sentence could have been written without reading the papers. Genre and transparency: as in Op-Ed #1.
17-15	Clear position; three papers used but their findings summarised more than weighed; counter-evidence acknowledged but brushed past.
14-12	The generic essay: claims that could attach to any paper, citations as name-drops, methods and findings absent, no counter-evidence.
11-10	No real position, fewer than three papers, or no evidence of reading beyond abstracts.
9-0	Not submitted meaningfully, or does not engage with the course.

■ FINAL PROJECT: AN AI ANSWER FOR KAZAKHSTAN (40%)

The spine of the course, and your personal project, not a paper. Working with your AI across the whole semester, you design a solution to one social or economic issue affecting Kazakhstan, your choice: air pollution in Almaty, water scarcity, domestic violence services, gender inequality, regional poverty, rural healthcare access, labor migration, disinformation, road safety, or anything else you can defend as real and pressing. You build it as a public website (GitHub Pages or another public platform) and present it live in Weeks 13-14.

There is nothing to hand in along the way: no paper, no drafts. Build at your own pace with your AI, bring it to consultations as it grows, and have it live by your presentation slot (sign-up on the Course Hub). The one thing you submit is your exported AI Process Log, on Moodle by 11 pm on the day you present. The project is graded as it stands at your presentation: the four sections (30 points), the design (5 points), and the presentation (5 points). The four sections together run 3,200-3,600 words, which puts the writing in this course at roughly 5,000-6,000 words across the semester.

You do not need to know how to code: you work the site out with AI, and figuring out how is part of the exercise. This time design is part of the grade: not expensive polish, but an innovative and clear way to present your narrative.

The four sections. Each part of the semester equips the corresponding section:

Section 1. The Problem (5 points). Name the issue and scope it the way a social scientist would: who is affected, where, at what scale, and how it is changing over time. Show the problem is real with at least three credible sources (official statistics, reports, serious journalism), and name the social-science question inside the issue: what about people, institutions, or power makes this a problem, and for whom?

Section 2. Background & Data (7 points). Map the data landscape. What do the Bureau of National Statistics, ministries, international organisations (World Bank, UNDP, WHO), and researchers measure about this issue, and what does the data actually show? Build at least one figure or table of your own from real data. Then the harder half: where is the data silent, who falls through the gaps, and how far can the available numbers be trusted? That assessment is part of the grade.

Section 3. Current State of Research (7 points). How have researchers studied this problem in Kazakhstan, the region, and globally? Engage at least six academic sources, organised by approach rather than listed one by one. What is known, what is contested, where does the research fall short? End with the gap your project speaks to.

Section 4. The AI-Assisted Solution, and What It Would Cost (11 points). The centrepiece, in two halves.

The solution. Propose how AI could be integrated to address the issue: what kind of system, doing what, run by whom, reaching whom. Ground it in at least two documented, real case studies where AI was successfully implemented in a similar sphere elsewhere, with sources: what was built, and what it achieved.

The bill. Price your own proposal with the tools from Parts III and IV:

- **Environmental:** the energy, water, and compute your solution implies, set against Kazakhstan's grid.
- **Economic:** what it costs, who pays, and who profits.
- **Labor:** whose work changes or disappears, and whose hidden labor (annotation, moderation, maintenance) the system depends on.
- **Political and governance:** surveillance and misuse risk, data localisation, who controls the system, and how it sits with Kazakhstan's Law on Artificial Intelligence and the Week 12 frameworks.
- **Data ethics:** what data the solution needs, whose consent that requires, and what could go wrong.

Close with a verdict: knowing the costs, should Kazakhstan actually do this? An honest "no, and here is why", or "only under these conditions", is worth as much as a yes. Tech-solutionism, a solution pitched with its costs waved away, is the one failure mode this section is designed to catch.

Somewhere on the site: your AI transparency statement (what AI contributed to the project and the site, what you accepted, and what you rejected and why).

Sections rubric (30 points):

POINTS	CRITERIA
30-26	Problem: specific, scoped, evidenced; the social-science question named, not implied. Background & Data: real data used and honestly assessed; the silences mapped; the figure or table does analytic work. Research: sources organised by approach and engaged critically; the gap follows from the review. Solution & costs: the proposal concrete and grounded in real, documented case studies; every cost dimension assessed with course tools; the verdict follows from the bill, and conditions or refusal are argued as seriously as endorsement. Craft: the transparency statement is honest, and every source and number checks out.

POINTS	CRITERIA
25-21	All four sections present and solid, but uneven: the scoping soft, silences skipped, research listed more than organised, case studies thin, one or two cost dimensions perfunctory, or the verdict stated but not fully argued from the bill.
20-15	Sections present but shallow: a topic rather than a scoped issue; data described without assessment; a bibliography with commentary; costs treated as a formality; a verdict that ignores the costs found.
14-8	Major sections missing or perfunctory; no real data work; no genuine case studies; the cost assessment absent or decorative.
7-0	No presentable project.

Reference and accuracy penalty: any fabricated reference, invented statistic, or hallucinated claim presented as real puts the sections grade under 18 (of 30). You are responsible for verifying everything AI helped produce.

Explain-it penalty: the project is yours to defend. A concept, source, analytical choice, or number you cannot explain when I ask, at your presentation or in a consultation, drops the sections grade one band; where it runs across several sections, it puts the sections grade under 18 (of 30).

Design (5 points):

POINTS	CRITERIA
5	The site tells its story: a visitor who never took this course can follow the arc from problem to verdict. Navigation is clear; visualisations do analytic work rather than decorate; the design fits the topic and could only be this project's.
4	Clear and complete, with real creative touches; visuals present but mostly illustrative.
3	Functional but generic: walls of text, decorative visuals, a template with content poured in.
2	Hard to navigate or bare; little evidence of design thinking.
1-0	Broken, or effectively no designed presentation.

Presentation (5 points, Weeks 13-14). You present your project live from your site in 8-10 minutes, followed by short questions that you answer without AI (notes allowed, no device). Slot sign-up on the Course Hub.

POINTS	CRITERIA
5	All four sections land within time; a non-specialist would follow; the verdict and its reasoning get their due, limitations owned honestly; questions answered confidently with no AI.
4	Solid presentation with minor overruns or one section rushed; small stumbles on questions.
3	Content covered but read off the site; timing uneven; visible trouble on questions.
2	Major sections missing or unclear; cannot answer basic questions about own project.
1-0	Not presented meaningfully.

AI Process Log (checked, not scored). Keep a dedicated project chat inside your PLS419 project, use your pseudonym, export it as a PDF (Print, then Save as PDF), and submit it on Moodle by 11 pm on the day you present. Claude checks the log for intellectual engagement across the semester: iteration on the structure, the argument, the literature, the data, and the drafts, not a single "build me a site" task. A log that shows engagement adds nothing to your grade; a log that shows none costs 5% of the project grade.

■ AI -FREE CHECKPOINTS (NOT GRADED)

In Weeks 3, 7, 10, and 12, the first 10 minutes of the session is a short analytic task done without AI, typed into Moodle. These are not graded and not part of any assignment; they are practice in reasoning with the tool set aside. Only if you consent (see Research and Data Collection), they feed the cognitive-partnership study as a without-AI baseline. The no-AI questions after your final presentation serve the same purpose.

■ GRADING, MODERATION AND APPEALS

All grades are Dina's. Claude checks the AI Process Logs for intellectual engagement and runs source verification on the op-eds and final projects (checking that cited sources and statistics exist and say what you claim); anything Claude flags, Dina reviews herself before any penalty touches a grade.

Moderation. Under the PSIR department moderation policy, grading in this course is moderated. For each op-ed and for the final project, three pieces of work are selected after marking, one from the top quartile, one from the middle and one from the bottom quartile, and sent to the PSIR Grade Moderation Committee for blind double-grading against the same rubric. Moderation checks that the marking standard is consistent; it does not change an individual grade.

Appeal to Dina. If you disagree with a grade or a penalty, appeal to Dina within 7 days. She re-grades against the same rubric and may adjust the grade up or down. Her decision is the last word at the course level. If you still disagree, you can appeal to the department, as described below.

Appeal to the Grade Moderation Committee. If, after speaking with Dina, you still believe your work was graded unfairly or inconsistently with the rubric, submit a formal appeal within 2 weeks of receiving the grade: email psir@nu.edu.kz with the subject line "Grade Appeal", and include your name, course, the assignment, and a brief explanation of your concern. Appeals are reviewed for consistency with the grading criteria and fairness, not for minor point adjustments; the committee may consult Dina or arrange an independent review, and the outcome may leave the grade the same, raise it, or (rarely) lower it.

14 Grading Scale

A	95 - 100	B+	85 - 89	C+	70 - 74	D+	55 - 59
A-	90-94	B	80-84	C	65-69	D	50-54
		B-	75-79	C-	60-64	F	0-49

Rounding. Your course total is rounded to the nearest whole percentage point before the letter grade is worked out, so 89.5 becomes 90 and an A-, and 89.4 stays 89 and a B+. Rounding happens once, at the end,

on the total. Individual assignment marks are not rounded on the way.

No curving. Your grade is what the rubric gives it. I do not curve, scale, or adjust the spread of grades in the class to hit a target distribution.

15 Weekly Schedule and Readings

■ WEEK 1 • AUG 19: INTRODUCTION TO COURSE AND AI CO-WORKING

How this course works and how we work with AI in it: course mechanics (the Course Hub, Moodle, the op-eds, the project, chairing), the AI co-working setup (the two rules, your PLS419 project, pseudonyms), and the journey ahead. Chair sign-up closes before this session (form on the Course Hub).

Readings: this syllabus and *A Field Guide to a Phenomenon in Motion* (Course Hub). Your Week 1 job is to study both.

Also this week: the knowledge test for the study (16 questions, paper, no AI, ungraded) just before the break, and the take-home pre-course survey (see the survey bonus note).

■ PART I. WHAT IS THIS THING? (WEEKS 2-4)

■ WEEK 2 • AUG 26: UNDERSTANDING, OR SOMETHING WE HAVE NO WORDS FOR? (3 CHAIRS)

Does an LLM understand? Both readings push back on the standard framings: what these systems do with meaning and reasoning may be neither human understanding nor nothing, and our vocabulary may not be adequate to it yet.

Prepare (everyone): read both texts. Start a five-day AI diary this week (every AI interaction in your life: what, why, how it felt); it is raw material for Op-Ed #1.

Required:

- Mitchell, M., & Krakauer, D. C. (2023). The debate over understanding in AI's large language models. *PNAS*, 120(13), e2215907120.
- Farrell, H., Gopnik, A., Shalizi, C., & Evans, J. (2025). Large AI models are cultural and social technologies. *Science*, 387(6739), 1153-1156. (Author version linked on the Hub.)

■ WEEK 3 • SEP 2: COULD IT BE CONSCIOUS? (6 CHAIRS)

The hard question, taken seriously rather than laughed off. AI-free checkpoint opens the session.

Required:

- Chalmers, D. (2023). Could a large language model be conscious? arXiv:2303.07103.
- Birch, J. (2024). Large language models and the gaming problem. In *The Edge of Sentience: Risk and Precaution in Humans, Other Animals, and AI* (Ch. 16). Oxford University Press (open access).
- Nagel, T. (1974). What is it like to be a bat? *The Philosophical Review*, 83(4), 435-450. [Moodle]

■ WEEK 4 • SEP 9: MORAL STATUS AND THE ONTOLOGICAL CHALLENGE (4 CHAIRS)

If we cannot rule mind out, what follows? The week where ontology turns practical.

Required:

- Long, R., Sebo, J., et al. (2024). Taking AI welfare seriously. arXiv:2411.00986. Read §1 (pp. 3-9), §2.1 and §2.4 (pp. 10-11, 25-28), and §4 (pp. 42-44).
- Danaher, J. (2020). Welcoming robots into the moral circle: A defence of ethical behaviourism. *Science and Engineering Ethics*, 26(4), 2023-2049. [Moodle: author's preprint; its page numbers apply.] Read pp. 1-11 closely (the Sophia controversy, the argument, the case for ethical behaviourism), plus the deception objection (pp. 17-19), the "Thinking Otherwise" objection (pp. 19-22), and the performative threshold (pp. 24-29); skim the rest.

Op-Ed #1 due Fri Sep 11, 11 pm.

■ PART II. AI AS RESEARCH COLLABORATOR (WEEKS 5-8)

■ WEEK 5 • SEP 16: CAN AI IMPROVE SOCIAL SCIENCE? (4 CHAIRS)

The general case, and the part's framing question: augmentation or replacement?

Required:

- Bail, C. A. (2024). Can generative AI improve social science? *PNAS*, 121(21), e2314021121.
- Lin, H., & Zhang, Y. (2025). Navigating the risks of using large language models for text annotation in social science research. *Social Science Computer Review*. (Hub copy: arXiv preprint.)
- Binz, M., Alaniz, S., Roskies, A., et al. (2025). How should the advancement of large language models affect the practice of science? *PNAS*, 122(5), e2401227121.

■ WEEK 6 • SEP 23: AI IN QUALITATIVE RESEARCH (4 CHAIRS)

Can a model do interpretive work? Three answers from inside the attempt.

Required:

- De Paoli, S. (2024). Performing an inductive thematic analysis of semi-structured interviews with a large language model: An exploration and provocation on the limits of the approach. *Social Science Computer Review*, 42(4), 997-1019.
- Ashwin, J., Chhabra, A., & Rao, V. (2025). Using large language models for qualitative analysis can introduce serious bias. *Sociological Methods & Research*. (arXiv preprint linked on the Hub.)
- Dunivin, Z. O. (2025). Scaling hermeneutics: A guide to qualitative coding with LLMs for reflexive content analysis. *EPJ Data Science*, 14, 28.

■ WEEK 7 • SEP 30: AI IN QUANTITATIVE RESEARCH: SILICON SAMPLES (4 CHAIRS)

The boldest claim in the applied literature, and the study that tested it head-on. The op-ed menu carries further tests, including the failure cases beyond the US. AI-free checkpoint opens the session.

Required:

- Argyle, L. P., et al. (2023). Out of one, many: Using language models to simulate human samples. *Political Analysis*, 31(3), 337-351. (Hub copy: arXiv preprint.)

- Bisbee, J., et al. (2024). Synthetic replacements for human survey data? The perils of large language models. *Political Analysis*, 32(4), 401-416.
- Kozlowski, A. C., & Evans, J. (2025). Simulating subjects: The promise and peril of artificial intelligence stand-ins for social agents and interactions. *Sociological Methods & Research*, 54(3), 1017-1073. (Hub copy: SocArXiv preprint; read the main text, pp. 1-32.)

■ FALL BREAK • OCT 5-9

No class.

■ WEEK 8 • OCT 14: BETTER RESULTS, WORSE THINKING? (4 CHAIRS)

The over-reliance question, on primary evidence, read against your own semester of coworking so far.

Required:

- Lee, H.-P., et al. (2025). The impact of generative AI on critical thinking: Self-reported reductions in cognitive effort and confidence effects from a survey of knowledge workers. *CHI 2025*.
- Bastani, H., et al. (2025). Generative AI without guardrails can harm learning: Evidence from high school mathematics. *PNAS*, 122(26), e2422633122.

Also this week (short): Hurley, K. (2025). The paradox of AI assistance. *EDUCAUSE Review* (link on the Hub). Read it as the genre model for Op-Ed #2: a student engaging the research literature in op-ed form.

■ PART III. WHAT IT COSTS (WEEKS 9-10)

■ WEEK 9 • OCT 21: THE ENVIRONMENTAL BILL (4 CHAIRS)

The full lifecycle of intelligence at scale, and the disclosure gap that keeps most of it unmeasured. The tools of this week price your own project's solution.

Required:

- Luccioni, S., Trevelin, B., & Mitchell, M. (2024). The environmental impacts of AI: Policy primer. Hugging Face. DOI 10.57967/hf/3004.
- Li, P., Yang, J., Islam, M. A., & Ren, S. (2023). Making AI less "thirsty": Uncovering and addressing the secret water footprint of AI models. arXiv:2304.03271.
- International Energy Agency (2026). Key questions on energy and AI. IEA, Paris. Read the executive summary (pp. 9-14) and Question 8, whether data centres are raising electricity prices (pp. 67-77).

■ WEEK 10 • OCT 28: THE HUMAN LABOR BEHIND THE MODEL (3 CHAIRS)

The people inside the assemblage. AI-free checkpoint opens the session.

Required:

- Williams, A., & Miceli, M. (2023). Data work and its layers of (in)visibility. *Just Tech* (SSRC). (Link on the Hub.)
- Gmyrek, P., et al. (2025). Generative AI and jobs: A refined global index of occupational exposure. ILO Working Paper 140. Read the findings, pp. 37-47.

- Tubaro, P., Casilli, A. A., & Coville, M. (2020). The trainer, the verifier, the imitator: Three ways in which human platform workers support artificial intelligence. *Big Data & Society*, 7(1).

Op-Ed #2 due Fri Oct 30, 11 pm.

■ PART IV. WHO GOVERNS IT? (WEEKS 11-12)

■ WEEK 11 • NOV 4: AI, THE STATE, AND POWER (6 CHAIRS)

What states do to and with AI.

Required:

- Alyukov, M., et al. (2025). LLMs grooming or data voids? Chatbot references to Kremlin disinformation reflect information gaps, not manipulation. *HKS Misinformation Review*, 6(5).
- Sastry, G., Heim, L., Belfield, H., et al. (2024). Computing power and the governance of artificial intelligence. arXiv:2402.08797. Read §1 Introduction and Summary (pp. 2-6), §3 Why compute governance is attractive for policymaking (pp. 19-33), §5 Risks of compute governance and possible mitigations (pp. 60-71), and §6 Conclusion (pp. 72-73); §4 (pp. 34-59) catalogues the mechanisms, skim it.
- Earl, J., Maher, T. V., & Pan, J. (2022). The digital repression of social movements, protest, and activism: A synthetic review. *Science Advances*, 8(10), eabl8198.

■ WEEK 12 • NOV 11: GOVERNING AI IN KAZAKHSTAN AND BEYOND (4 CHAIRS)

The governance week, at home: Kazakhstan's Law on Artificial Intelligence (No. 230-VIII, signed November 2025, in force since January 2026, the first in Central Asia) meets the global frameworks. AI-free checkpoint opens the session.

Required:

- Buribayeva, M., Khamzina, Z., & Buribayev, Y. (2026). Potential negative effects of artificial intelligence in Kazakhstan's public sector: An analysis of hidden risks. *Frontiers in Artificial Intelligence*, 9, 1781993. Read §1, §4 (Results), and §5 (Discussion).
- Roberts, H., Hine, E., Taddeo, M., & Floridi, L. (2024). Global AI governance: Barriers and pathways forward. *International Affairs*, 100(3), 1275-1286.
- Mhlambi, S. (2020). From rationality to relationality: Ubuntu as an ethical and human rights framework for artificial intelligence governance. Carr Center Discussion Paper 2020-009. [Moodle]

Primary instruments (excerpts on the Hub): Kazakhstan Law No. 230-VIII "On Artificial Intelligence" (2025); EU AI Act (2024); OECD AI Principles (2019); UNESCO Recommendation on the Ethics of AI (2021); Kazakhstan AI Development Concept 2024-2029 (background).

■ WEEK 13 • NOV 18: FINAL PROJECT PRESENTATIONS I

First half of the roster presents (slot sign-up on the Course Hub): 8-10 minutes from your live site, then no-AI questions.

Second half of the roster presents. We close the journey where it started: what is this thing, now that you have spent a semester building with it? The closing knowledge test (16 questions, paper, no AI, ungraded) runs just before the break; the post-course survey is take-home this week (see the survey bonus note).