

Writing Research with AI

A Crash Course on AI Tools for Research

Course Overview

Title	Writing Research with AI: A Crash Course on Social Research Methods with AI Tools
Format	8 lessons of 1.5 hours each (12 hours total)
What You'll Learn	How to use AI tools as a research partner; how to find, evaluate, and verify sources; how to cite and build bibliographies; how to design interview guides and surveys; how to transcribe and summarize interviews; how to recognize AI-generated text and write in your own voice; and how to document your use of AI responsibly.
AI Tools You'll Use	Chat assistants (Claude, ChatGPT, Gemini), academic search tools, reference managers (Zotero), transcription tools, and writing assistants. Free versions are fine.

What You'll Be Able to Do

By the end of this course, you will be able to:

- Use AI tools thoughtfully as a research partner
- Find sources in academic databases and verify that AI isn't making them up
- Create accurate citations and bibliographies, with or without AI help
- Write a clear research question and thesis that you can defend
- Know when to use surveys, interviews, or focus groups, and design them
- Transcribe interviews and summarize them with AI while protecting participant privacy
- Spot AI-generated text and rewrite it in your own voice
- Put sources in conversation with each other instead of just listing them
- Document how you used AI and explain your choices clearly

How the Course Is Organized

Lesson	Focus
1	What is research? How do AI tools work? Finding your research question.
2	Finding and evaluating sources—what AI can help with, and what you have to do yourself.
3	Citations, bibliographies, and how to verify sources before you cite them.
4	Designing surveys, interview guides, and focus group protocols.
5	Transcribing and summarizing interviews with AI, while respecting privacy.
6	Developing your scholarly voice and recognizing AI-generated text.

7	Building a thesis, creating a research project outline, and putting sources in conversation.
8	Review of AI tools, useful prompts, and when and how to disclose your use of AI.

Lesson Plans

Each lesson runs 1.5 hours and produces a deliverable. Every lesson incorporates hands-on work with AI tools matched to that lesson's task.

LESSON 01. What is Research, and What is AI? *Foundations of research, research types, and what AI tools can and cannot do*

AI focus this lesson

Set up your AI toolkit (one chat assistant and one search tool). Learn what these tools actually do and what they get wrong.

Topics covered

- The parts of a research project: question, sources, methods, findings, conclusion
- Types of research: surveys, interviews, experiments, content analysis, historical research
- How AI assistants work and why they sometimes make things up
- Moving from a vague idea to a research question you can actually investigate

Lesson deliverable: A research question

One sentence that asks something you want to know. You'll develop it throughout the course.

LESSON 02. Finding and Evaluating Sources *Source literacy, critical reading, and using AI to search without being fooled*

AI focus this lesson

Use AI search tools to find sources, then verify every result. After you've read a source closely, summarize it with AI and compare—this shows where the tool misses what's important.

Topics covered

- Types of sources: academic journals, books, reports, news, and which are more reliable
- The CRAAP test: Currency, Relevance, Authority, Accuracy, Purpose
- Why AI assistants invent sources and how to spot this
- How to read critically: spotting the main argument, the evidence, and possible weaknesses
- Taking notes that help you write later (Cornell notes, comparison charts)
- Quoting vs. paraphrasing, and why AI paraphrasing can be plagiarism

Lesson deliverable: Five verified sources with detailed reading notes on two of them

The notes should say what each source argues and why it matters to your question.

LESSON 03. Citations and Annotated Bibliographies *Academic integrity, citation verification, and describing your sources*

AI focus this lesson

Ask AI for citations in proper format, then verify each one—checking DOIs, journal lookups, author affiliations. This shows where AI is reliable and where it fabricates. Use a reference manager (Zotero) to stay organized.

Topics covered

- Why citations matter: intellectual honesty, giving credit, helping readers find sources
- Citation styles (APA, MLA, Chicago) and when to use each
- How to verify sources: DOI check, journal lookup, author affiliation
- When AI citations are reliable and when they're made up
- Using Zotero to manage sources
- Annotations: summarizing the source, evaluating it, and saying why it matters to your project

Lesson deliverable: A bibliography of five sources with annotations

Each annotation should explain what the source says, whether it argues well, and why it's important.

LESSON 04. Questionnaire Design *Designing surveys, interviews, and focus groups, and testing them with AI*

AI focus this lesson

Once you have a draft instrument, use AI to review it: ask it to 'act as a skeptical reviewer,' 'respond as a participant who would find this confusing,' or 'what assumptions are embedded in this question?'

Topics covered

- When to use surveys (breadth), interviews (depth), or focus groups (interaction)
- Turning your research question into questions people can answer
- Question types: closed, open-ended, multiple choice, ranking, demographic
- What to avoid: leading questions, double-barreled questions, loaded language
- Question order, flow, and where to place sensitive items
- Research ethics: informed consent, confidentiality, asking only what's necessary

Lesson deliverable: A draft questionnaire, survey, or interview guide

It should be ready to test on a few people before you use it for real research.

LESSON 05. AI for Interview Transcription and Summaries *Transcribing and summarizing with AI, while protecting privacy and accuracy*

AI focus this lesson

Work from a recorded interview to produce an AI transcript. Correct it against the audio. Then generate a summary and verify it against the corrected transcript.

Topics covered

- Why transcription matters in qualitative research
- AI transcription tools: strengths, weaknesses, suitability for different recording conditions
- Correcting and verifying transcripts against the source audio
- Summarizing interviews: faithful summary vs. conflation or invention
- Consent and confidentiality: telling participants about AI processing
- Data handling: where to store recordings and how to anonymize transcripts

Lesson deliverable: A corrected transcript and a verified summary

Include a note on the consent and confidentiality measures you observed.

LESSON 06. Scholarly Voice and the Patterns of AI Voice *Developing your voice, recognizing AI-generated text, and editing effectively*

AI focus this lesson

The most direct work with writing assistants happens here. Examine the linguistic signature of AI text, then revise AI-assisted drafts into recognizably human scholarly prose.

Topics covered

- Scholarly writing: formal register, measured hedging, objectivity, precision
- Developing your individual voice: when to be formal, when to be conversational
- Using writing assistants effectively: what they're good for and what they're not
- Recognizing AI voice: over-hedged phrasing, hollow openers, heavy em-dashes, uniform polish
- The edit-down workflow: draft with AI, then deliberately remove AI markers
- Sentence variety: mixing simple, compound, and complex sentences

Lesson deliverable: A paragraph written in your scholarly voice

Analyze a well-written piece of professional writing and explain what its voice accomplishes.

LESSON 07. Thesis, Structure, and Putting Sources in Conversation *Argument, synthesis, and the components of a research project*

AI focus this lesson

Synthesis is where AI is most appealing and least reliable. Use AI as a thinking partner ('Where do my sources disagree?' 'What's the strongest counter to my thesis?' 'Group these into themes'), then conduct the synthesis yourself.

Topics covered

- Writing a thesis statement that is clear, arguable, and grounded in sources
- Using AI to stress-test your thesis

- The standard sections of a research project: introduction, literature review, methodology, discussion, conclusion
- Synthesis vs. summary: placing sources in conversation instead of listing them
- Mapping where sources agree, disagree, complement, or build on each other
- Why AI synthesis is frequently inaccurate
- Organizing by theme or debate, with clear signal phrases and citations

Lesson deliverable: A thesis statement and an outline showing how sources fit together

Show which sources agree, disagree, or build on each other.

LESSON 08. AI Tools, Prompts, and Research Ethics *Reviewing what worked, useful prompts, and when and how to disclose AI use*

AI focus this lesson

Meta-review of AI as a research partner: which tools were most reliable, what prompts worked, and how to disclose your use transparently.

Topics covered

- The AI toolbox: strengths and failure modes of each tool you used (chat assistants, search, reference managers, transcription, writing assistants)
- Effective prompts: examples that worked for thinking, verifying, and editing
- Disclosure: when it's mandatory, what to disclose, and how (methods note, appendix, AI-use log)
- Privacy and consent: when to tell participants about AI processing, where to store data, data handling
- Your responsibility: AI output is always a draft you verify; you remain accountable