



Understanding and Working with AI

A Conceptual Academy Program

User's Manual

Welcome

Welcome to Understanding and Working with AI — a program designed not just to inform you about artificial intelligence, but to help you genuinely understand it, use it effectively, and think critically about its role in the world.

This manual is your practical companion. It explains how the program is structured, how to earn your credential, how to make the most of the tools available to you, and a few things worth knowing before you dive in.

Read it once at the start. Refer back to it whenever something feels unclear. And then get to work — there's a lot of good thinking ahead.

How the Program Is Organized

Each chapter of this program contains a sequence of lessons. There are five distinct lesson types, each with a different purpose and a different feel. Getting familiar with them will help you know what to expect — and what's expected of you — as you move through the material.

CORE LESSON

Core lessons are the heart of the program. Each one includes a textbook reading (provided as a PDF) and a companion video hosted by the author. These two don't simply repeat each other — they complement each other. You might find the video brings the reading to life, or that the reading gives you something to return to after watching. We suggest engaging with both.

SPOTLIGHT LESSON

Spotlight lessons are short essays that explore an interesting application or implication of the chapter's core ideas. Think of them as a pause to look around — to see where these concepts show up in the real world, sometimes in surprising ways. They are meant to be thought-provoking and enjoyable.

LAB LESSON

Lab lessons are guided experiments that come in the form of a conversation with your AI. You'll be given a protocol to follow, questions to investigate, and observations to make. You can use any AI you have access to, but this program includes Alia-Lab, a customized AI instance built specifically for this work. Find the link to Alia-Lab within each lab lesson. One important note: each Alia-Lab session is a fresh start. Closing the window ends the session. Save anything you want to keep. These fresh starts are intentional to maintain your data privacy.

PROJECT LESSON

Project lessons invite you to apply what you're learning to a creative literary work of your own. Over the course of the program, you'll develop this project — whether it's a novel, an autobiography, a play, a collection of poems, short stories, or something else entirely. You need not finish the work by the end of the program, but you will have launched it. Each project lesson gives you access to Alia-Creative, a customized AI built for creative collaboration. Like Alia-Lab, each session is a fresh instance: closing the window means starting fresh next time.

REFLECTION LESSON

Reflection lessons are exactly what they sound like — structured opportunities to pause and think about what you've been learning. Reflection is an often underrated step in the learning cycle, but not here. These lessons offer prompts to help you process the material more deeply, notice connections, and articulate what's becoming clear (or still murky). Your field journal is the natural home for your reflections.

Meet Alia: Your AI Learning Companion

Alia is the name we use for the customized AI instances built into this program. There are three versions of Alia, each with a distinct role. Here's a brief introduction to each.



Learn with Alia



Learning
Assistant

Alia-Lab

Alia-Lab lives within each Lab Lesson. It's your experimental partner — the AI you'll converse with, probe, challenge, and study as part of the guided lab protocols. Alia-Lab is a wrapper built on ChatGPT.

Remember

Each Alia-Lab session is a fresh instance. When you close the session, it's gone. Copy anything important before closing — your observations, interesting outputs, or conversation excerpts worth saving.

Alia-Creative

Alia-Creative lives within each Project Lesson. It's your creative collaborator — a conversational workspace where you can develop characters, explore plot ideas, draft passages, and refine your creative work with AI assistance. Alia-Creative is also built on ChatGPT.

Because Alia-Creative supports document work and artifacts, you'll want to manage two kinds of files as your project develops:

- Your prompt document — a running record of the prompts that have worked well for you, which you can reuse and refine across sessions.
- Your creative work itself — the actual writing you're producing and iterating on.

Remember

Like Alia-Lab, each Alia-Creative session is a fresh start. Your previous conversation will not be remembered. Keep your documents updated between sessions so you can pick up where you left off.

Alia-Tutor

Alia-Tutor is a little different. Rather than being tied to a specific lesson type, it appears as a link just below each Homework Practice Session (more on those shortly). If an HPS question leaves you puzzled, Alia-Tutor can help you understand it — not by giving you the answer outright, but by guiding you toward understanding.

Alia-Tutor has been trained on both the program content and the complete question bank, so it knows the material well. It's built on Claude (by Anthropic).

A fun meta-detail

Because Alia-Tutor is a fully capable AI assistant, you can also use it as a subject for your Lab experiments — just as you would any other AI. Ask it questions. Test its limits. See how it responds to different kinds of prompts. This is all fair game. It's also an easy way of comparing a ChatGPT instance against a Claude instance.

Your Field Journal

Throughout this program, you'll encounter a recurring icon: the field journal prompt. It appears in core lessons, lab lessons, project lessons, and reflection lessons alike. Wherever it appears, it's an invitation to stop and write.

We recommend a simple composition notebook — the kind you can find at any grocery store or office supply shop. Why analog? Partly to give your eyes a break from the screen. Partly because there's something about handwriting that slows thinking down in a useful way. But if you prefer to keep your journal on a tablet, laptop, or phone, that works too. What matters is that you keep one.



Here are some of the things you might record in your field journal:

- Notes and sketches from core lesson readings or videos
- Observations from lab experiments — what you tried, what surprised you, what you noticed
- Early ideas and rough drafts for your creative project
- Responses to reflection prompts
- Questions that occur to you as you work through the material

The field journal is not graded in the traditional sense. But it is woven into the fabric of the program — and if you ever need a manual review of your credential (see below), your field journal entries are part of what tells your story as a learner. For example, share it with others, including a supervisor, and they will immediately know the depth of your experience in taking this program.

The underlying idea

This program asks you to do more than nod along. It asks you to pick up a pen. The field journal is where thinking becomes visible — to yourself, if no one else.

Earning Your Credential

This program uses a point accumulation system rather than traditional grades or a pass/fail structure. You start at zero — because you haven't done anything yet. From there, you build your way up through the assessment system at whatever pace works for you.

Three Types of Assessments

There are three types of assessments in this program, each earning a different number of points per correct answer:

Assessment Type	What It Is	Points per Correct Answer
Video Quiz	Questions tied to the video lessons	5 points
Reading Quiz	Questions tied to the textbook readings	5 points
Homework Practice Session (HPS)	More challenging, higher-stakes practice questions	10 points

Chapter Credentials (5 Hours Each)

Each chapter has a point threshold of around 200 points. Once you cross that threshold, a certificate becomes available for download directly from your gradebook. The certificate is customized with your name and the date, and is good for 5 hours of professional learning credit.

If your reporting authority requires manual verification, an email address is provided on the certificate for that purpose — we're happy to confirm your completion directly.

Volume Credential (20 Hours)

If you reach the threshold for the volume of all four chapters, which is over 800 points, you then qualify for the full volume credential — worth 20 hours of professional learning credit.

You'll want to know that you don't need to credential in every chapter individually to earn the volume credential. If you fell just short in one chapter but ran up extra points in another, those points count toward your total. It's the accumulated score that matters, not the chapter-by-chapter breakdown.

The Manual Verification Pathway

As a final safety net, learners who have genuinely engaged with the program but haven't quite hit the point threshold through quizzes alone can submit photos of select field journal entries. Combined with your gradebook data, this gives us what we need to manually award the credential. The only way not to earn your credential is to stop studying.

A note on guessing

You might wonder, what if someone just randomly guesses on every quiz? They could try, but the question bank is deep just enough that random guessing will very likely exhaust the available questions before reaching the threshold. The system is designed to reward genuine engagement.

Unit Exams and the Pyramid Format

After every even-numbered chapter (Chapters 2, 4, 6, and 8), you'll find a Unit Exam. These are a collection of ten questions drawn directly from the HPS question bank — which means working through them is also excellent preparation for earning HPS points.

But unit exams have a purpose beyond point accumulation. They come with instructions for the Pyramid Exam Format — a collaborative approach to assessment that we think is genuinely worth knowing.

What Is the Pyramid Exam Format?

The pyramid format turns a quiz into a conversation. Rather than answering each question alone, you work through it in stages:

- First, you answer each question independently.

- Then you discuss your answers with a partner — a colleague, a friend, a family member — and together arrive at a revised set of answers.
- Finally, your consensus answers are submitted.

This format consistently produces better performance than individual testing. It is formative assessment, which means the questions are used for learning itself more so than for testing what has been learned. More importantly, it creates a natural occasion to share what you're learning with the people around you. For teachers, it also models an assessment approach they may want to bring into their own classrooms.

For teachers

The Unit Exams are the *same* Unit Exams provided among teacher resources on the PocketLab Notebook platform. If you're onboarding to teach this program at your campus, these exams give you direct experience with the material your students will encounter, as well as the Pyramid Format you'll be facilitating.

Volume 1 and Volume 2

This program is organized into two volumes, each containing four chapters.

- Volume 1 (Chapters 1–4) introduces the foundational concepts: what AI is, how it learns, how to work with it effectively, and the nature of AI bias.
- Volume 2 (Chapters 5–8) builds on that foundation, exploring AI in creative work, AI in decision-making, AI in media, and your AI-powered future.

If you're beginning with Volume 2 without having completed Volume 1, you'll find an orientation section in the Chapter 5 FYI page that covers the key program mechanics. However, we recommend starting from the beginning if you can — the chapters build on each other in ways that deepen the experience.

A Few Final Thoughts

This is a program that respects your human intelligence. We don't just hand you information to memorize. Rather, we ask you to think, experiment, reflect, and create.

The AI you'll be working with — and learning about — is one of the most consequential technologies of our time. Understanding it isn't just useful; it's increasingly essential. We're glad you're here with us on this journey.

After all, are we not the first generation to be using AI? The standards we set now — for originality, for voice, for expectation that human authorship means something — will shape what fills our bookstores, our libraries, our classrooms, our screens, and our professions for decades to come.

— *The Program Authors*

