

Adapting Writing Assignments to Generative AI

All learning is learning by doing. When an assignment requires writing, students learn from doing the writing, developing skills from domain knowledge to organizational acumen to editing for tone. This is so obvious academics have rarely needed to spell it out, but ChatGPT and related tools can now generate readable, relevant text at high volume, instantly, at low cost. Everyone can now *produce* topical writing without *creating* it.

To the degree students produce unedited writing with generative AI, they will be learning how to use generative AI, not how to write. Some faculty will consider this shift acceptable or even desirable, others will not, but in any case, the design of assignments that rely on writing will have to change.

This memo details possible instructor responses to potential student use of generative AI, including **advising against using the tools**, designing assignments to **avoid use of the tools**, and designing assignments to **embrace use of the tools**. It also covers some of the changes in dealing with academic integrity violations.

Even if an instructor does not intend to change individual assignments, the availability and generality of these tools increases the need for clarity around the instructor's expectations. Whatever strategies an instructor might adopt for individual assignments or a whole course, **instructors should explain to students what is expected around AI use.**

Before revising a syllabus or assignment, faculty should try ChatGPT or a similar tool at least once. (Instructions follow at the end of this document, in Appendix A.) Instructors should also familiarize themselves with any recommendations made by their schools regarding the use of generative AI.

When setting out course policy, the following principles for students are generally applicable:

1. When students use these tools, they should acknowledge that use
2. Students should understand that taking credit for writing they did not create violates both NYU's [Academic Integrity](#) policy and the norms of the academic community
3. The student is responsible for ensuring any errors in the writing they submit, even where it was automatically generated.

In order to help students understand these things, we recommend that instructors:

- Explain to students the expectations and reasons for your AI policy
- Explain what you expect students to learn from the assignments—both the goals you have for the work they do, and what they should learn from that work
- Be specific about Dos and Don'ts—"Do acknowledge and describe any AI use", or "Don't use any AI for this assignment"—in the syllabus or assignments
- Remember that students generally want to learn, and describe what students will learn from doing the work, not just the potential punishments for cheating

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Strategies for Assignments

While there are many individual strategies faculty can adopt for assignments, they can be broadly grouped into three categories:

1. **Advising Against:** Students are told they should not use generative AI
2. **Avoiding:** Assignments are (re)designed so that generative AI is not relevant
3. **Integrating:** Students are allowed or required to use generative AI, so long as that use stays within guidelines and is acknowledged

These strategies may cover a whole course, or be provided assignment by assignment, but whatever preferences an instructor may have about student use of AI, those preferences should be communicated directly.

1. Advising Against Use of Generative AI

Persuading students not to use these tools for some or all assignments will require explaining that the things you want them to learn from the assignment require that they do the work themselves.

The advantage of asking students not to use of these tools is that this strategy can preserve some of the design of individual assignments or a whole course. The disadvantage is that while you can recommend against use of these tools, you cannot prevent their use. Given the relative difficulty in detecting use of these tools, academic integrity cases can be harder to adjudicate, because most evidence is circumstantial.

Sample statement for syllabus:

Because writing is a form of thinking, you should not use ChatGPT or other AI tools as a shortcut or substitute for drafting and editing written work in this class. Taking credit for writing you did not create is a violation of NYU's Academic Integrity policy.

Advising against use of these tools asks students to self-police. If your school has an honor code, you should refer to it in your syllabus. If not, you may want to consider adding one for your class. (A list of school honor codes is at the end of this document.)

Advising against use of generative AI is compatible with designing assignments to avoid use of generative AI. Faculty may want to consider using elements of both strategies, instructing students not to use these tools *and* designing assignments that cannot easily be completed by these tools.

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2. Avoiding Use of Generative AI

Making generative AI less relevant means designing an assignment to require the kind of work where humans still significantly outperform machines.

The advantage of avoiding use of these tools is that assignments will be designed to require student effort. The disadvantage is that these assignments will be a moving target, as things the tools cannot do well this semester may become possible next semester, requiring regular review of their effectiveness.

Sample statement for syllabus:

Though you are welcome to use generative AI tools to brainstorm in the early phases of an assignment, you are expected to produce the assignments themselves on your own. (Taking credit for work you did not create is a violation of NYU's Academic Integrity policy.) The assignments have been designed around tasks or outputs the tools do not perform well, and your work will be graded down, perhaps substantially, if it fails to meet those expectations *regardless of how it was created*.

Where an instructor decides to design assignments that make use of generative AI less relevant, they should consider one or more of the following strategies:

- Collect early student thoughts about an assignment in class, to get a sense of how they write unaided
- Design assignments with greater emphasis on process — iterative work, submission of rough drafts, preserving edit history
- Ask for specific references or quotes from material studied in class
- Design assignments that require integration of discussions in class
- Design assignments tightly tied to specific course readings or concepts
- Design assignments that require oral presentation or in-class discussion

3. Integrating Use of Generative AI

Embrace of ChatGPT involves giving students explicit permission to use the tool in a course or on an assignment, but in approved ways. The list of possible ways these tools can be integrated into coursework is large and growing: a [list of strategies collected by UNESCO](#) runs to nearly a dozen items.

<u>Role</u>	<u>Description</u>	<u>Example</u>
Possibility engine	AI generates alternative ways of expressing an idea	Students write queries in ChatGPT and use the Regenerate response function to examine alternative responses.

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<u>Role</u>	<u>Description</u>	<u>Example</u>
Socratic opponent	AI acts as an opponent to develop an argument	Students enter prompts into ChatGPT following the structure of a conversation or debate. Teachers can ask students to use ChatGPT to prepare for discussions.
Collaboration coach	AI helps groups research and solve problems together	Working in groups, students use ChatGPT to find out information to complete tasks and assignments.
Guide on the side	AI acts as a guide to navigate physical & conceptual spaces	Teachers use ChatGPT to generate content for classes/courses (e.g., discussion questions) and advice on how to support students in learning specific concepts.
Personal tutor	AI tutors each student and gives immediate feedback on progress	ChatGPT provides personalized feedback to students based on information provided by students or teachers (e.g., test scores).
Co-designer	AI assists throughout the design process	Teachers ask ChatGPT for ideas about designing or updating a curriculum (e.g., rubrics for assessment) and/or focus on specific goals (e.g., how to make the curriculum more accessible).
Exploratorium	AI provides tools to play with, explore and interpret data	Teachers provide basic information to students who write different queries in ChatGPT to find out more. ChatGPT can be used to support language learning.
Study buddy	AI helps the student reflect on learning material	Students explain their current level of understanding to ChatGPT and ask for ways to help them study the material. ChatGPT could also be used to help students prepare for other tasks (e.g., job interviews).

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<u>Role</u>	<u>Description</u>	<u>Example</u>
Motivator	AI offers games and challenges to extend learning	Teachers or students ask ChatGPT for ideas about how to extend students' learning after providing a summary of the current level of knowledge (e.g., quizzes, exercises).
Dynamic assessor	AI provides educators with a profile of each student's current knowledge	Students interact with ChatGPT in a tutorial-type dialogue and then ask ChatGPT to produce a summary of their current state of knowledge to share with their teacher/for assessment.
Writing Consultant in training	AI learns from student concepts or strategies for providing meaningful effective feedback.	Students draw on concepts used in first-year writing class to instruct ChatGPT to provide meaningful feedback or identify opportunities for revision

Integrating the tools into assignments or a whole course must be accompanied by student reporting of why and how they used the tools, and what they think they learned from the assignment.

The advantage of integrating these tools is that it will encourage students to discuss their use in the context of the class. The disadvantage is that understanding student use will require new effort by the instructor. Involving students in this way will also make them more like co-designers of the assignments, which has both advantages (more engagement) and disadvantages (less predictability.)

Sample statement for syllabus:

Use of ChatGPT and related tools is allowed in this class, but only in ways noted in the assignments. (Taking credit for writing you did not create is a violation of NYU's Academic Integrity policy.) As with all assignments, learning from the work is your responsibility. You must use the tools in a way that involves effort you learn from.

For every assignment, you should also turn in a description of:

- Which tools and techniques you used (Include your prompts, any plugins you used, etc.)
- Which parts of the assignment you used them for

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- What you think you learned from the work you did, and why you think that matches the goals of the assignment

Be prepared to discuss your answers in class, or in conversation with me

Where an instructor decides to design assignments that integrate generative AI, they should consider one or more of the following strategies:

- Share examples of effective uses of the tool for brainstorming and iterating the output, rather than just copying and pasting the results of a single query
- Highlight the student's responsibility for the accuracy of any writing they submit, and the need to verify any references or claims in the text
- Design multi-step assignments that invite student deliberation, analysis, critique, and decision during the creation process

Academic Integrity Violations

Academic integrity policy is overseen by the schools, but we expect generative AI will make detecting and reacting to academic integrity more difficult. Unlike straightforward plagiarism, where copies of student writing can be found elsewhere, identifying writing created with ChatGPT et al but claimed as the student's own is a judgment call. Such accusations rely far more on the instructor's judgment about the student's capabilities and the writing produced than when the source material exists online or in a database.

If an instructor suspects a student of an academic integrity violation:

- Document reasons for believing the writing is not the student's own. Possible evidence includes:
 - Internal Patterns: Grammatical perfection, consistent but bland style, sudden changes in style or tone, vague and often unsubstantiated claims, spurious or incorrect references, and list structures masquerading as development of an idea
 - External Patterns: Writing does not match a student's previous work (particularly work produced in class), lack of rough drafts or evidence of editing, footnotes or references not related to the body of the text, footnotes or references pointing to work that does not exist.
- Ask the student if they used generative AI on the assignment in inappropriate or unacknowledged ways, given the evidence. One possible response, if it is in line with your school's policies, is to require them to redo the work, providing evidence of editing
- If they deny using these tools but you continue to suspect that they used them, involve your school administration.

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While there are a number of products that purport to positively identify AI-generated writing, they have high error rates. If you plan to use such detectors on student work, you should inform them at the outset of the class. **Instructors should *never* accuse a student of a violation based solely or mainly on the output of these detectors.**

When these tools have been tested by third parties, they are frequently inaccurate, and are easily defeated by simple editing strategies. Where there are false positives they are disproportionately targeted at students for whom English is an additional language. In the longer term, there is good reason to believe that these tools will become progressively less effective as AI tools improve.

Appendix A: Experimenting with ChatGPT

Go to chat.openai.com. (You will need to sign up for a free account if you haven't already.) You can ask it a question or make a request on that page.

Some example prompts you can feed ChatGPT:

- Can you write a memo outlining the pros and cons of student use of AI in a biology class?
- Please describe the different schools that make up NYU, and what their strengths are.
- Can you write a memo listing some ways urban universities are working to improve community relations?

You can use any of these, or, better, make up your own prompt. (If you would like more examples, there are many [listed here](#).) Once you see ChatGPT's response, you can ask followup questions. You can also ask the same question a second time (the Regenerate button) and see how subsequent answers differ.