

Faculty Guideline on Academic Use of Artificial Intelligence

Prepared by the Provost's Task Force on Artificial Intelligence – Fall 2023

Introduction:

Webster defines artificial intelligence (AI) as, "the capability of computer systems or algorithms to imitate intelligent human behavior" (Webster, n.d.). This definition indicates that the field of AI is broad and encompasses a variety of tools that affect and interact across a variety of industries and disciplines (e.g., education, medicine, business). Commonly, many academic communities associate AI with generative pre-trained transformers (GPTs); neural networks that operate behind the scenes of software applications that power generative text platforms like Chat GPT. There is a vast amount of information published on GPT systems. The University Library developed a <u>resource guide</u> to assist faculty with understanding these systems and staying up to date from a variety of voices and perspectives.

It is important for faculty to know they can set expectations for use of AI tools to complete course work in the courses they teach. Since students will take various courses across academic departments and schools, faculty must be explicit with their expectations on use of assistive technologies. In fact, the current required syllabus statement insert invites faculty direction to students on these matters.

Section XII. Academic Integrity

"...In no event may students cheat, copy, or plagiarize the work of others. The use of artificial intelligence tools (AI) in this course is subject to approval of the course instructor. When drawing from various resources for assignments, students shall provide proper citations, footnotes, and bibliographic information..."

The <u>University Core Values</u> direct and illuminate our approach to interacting with AI tools at Samford. We believe all the listed core values speak into our community's interaction with and use of assistive tools, including AI. We believe that we must take a spiritual outlook and approach to education as a unique Christ-centered learning community that elevates personal responsibility and accountability, undergirded by principles of honesty and integrity. We believe that we should respect and acknowledge the contribution and assistance of those people or things that contribute to our success in life.

- Learning and responsible freedom of inquiry
- Spiritual growth
- Integrity, honesty, and justice
- Appreciation for diverse cultures
- Vocational success

This guideline is structured in a question-and-answer format, to describe a "how to" approach for faculty when interacting with AI in the academic setting.

Questions and Responses for Faculty Consideration:

What are the benefits and limitations of AI?

The number of generative AI tools like ChatGPT is growing daily. There are several benefits and limitations that should be taken into consideration when utilizing these types of tools.

There are numerous benefits with using AI, including:

- Editing or overcoming writer's block.
- Increasing productivity by reducing repetitive work.
- Quickly processing large amounts of data and aid with coding.
- Improving instruction by brainstorming assignment ideas and assessments.

Limitations

- Generative AI tools are not necessarily search engines, which retrieve content based on keyword entries.
- Many generative AI tools were trained on the open internet and content from online communities such as Reddit. Both of those sources contain inaccurate and biased information.
- Generative AI tools "hallucinate" content, meaning they will produce answers that are not necessarily evidence based, including references that do not exist (Alkaissi & McFarlane, 2023).
- Privacy matters:
 - o Do not share personal or confidential information.
 - o Sharing a manuscript might violate publisher agreements.
 - o Any shared content may become a part of the generative AI tools.
- Some tech companies rely on underpaid workers to moderate and train generative AI tools (Rowe, 2023).
- Content used to train generative AI tools may be used without permission (Veltman, 2023).
- There is an environmental cost to using generative AI tools.

How can I approach assignment design using AI?

Whether or not AI is allowed for use in assignments, educators might consider requiring AI-contribution disclosure statements as part of submitted assignments, especially because plagiarism detectors are unlikely to keep pace with software developments.

There are many uses of programs like ChatGPT to help writers perform mundane tasks, such as:

- Creating outlines from notes
- Spell-checking and providing grammar improvement suggestions
- Considering alternative writing styles
- Brainstorming alternative viewpoints

Educators should be concerned, however, about students using generative AI to avoid learning. The key is designing assignments that do not ask students to regurgitate sources but rather

encourage them to make new connections between facts and foster understanding. Students who immediately rely on AI may miss opportunities to solve problems in novel and interesting ways.

Submitted assignments should de-emphasize skills in which ChatGPT excels, such as recalling isolated facts or grading primarily based on style and writing quantity.

If one wishes to restrict the use of AI programs, one should avoid generic assignments and instead create unique prompts for individual classes. One might require the essay (or outline) to be written in class, or one might ask for essays that provide a close comparison between texts with requests for textual evidence and footnotes for verification. Unique assignments that demand complex interpretations of data are less likely to be mimicked. View this resource for additional guidance.

Alternatively, other faculty members might permit the use of AI to enhance students' AI literacy. In this case, one might model proper AI use based on one's discipline. In a marketing class, for instance, one might ask students to create AI-generated marketing text, which the student would then evaluate thoroughly. In a sociology class, one might require students to assess an AI's interpretation of statistical data to enhance their comprehension of the concepts. In these cases, the goal is not merely to produce a finished scholarly output but to increase students' understanding of the strengths and weaknesses of AI programs.

What strategies can I use to discuss/engage AI with my students?

Innovations in AI offer fruitful grounds for conversations about the very nature of information, knowledge, and intelligence. Asking students to think about how they know something and what makes that information reliable is a formative step in building students' digital and AI-literacy. What does it mean, for instance, that we call this form of intelligence "artificial," and what does that say about our own forms of knowing? The founders of OpenAI, which created ChatGPT and GPT4, were intentional **not to use a human-sounding name** for the application (Stern). What does that say about how the designers' intended use for it? To what extent are they able to control and shape actual human behavior? Additionally, as a Christian institution, we can ask students what it means to know something by faith and ask them to reflect more intentionally on that kind of knowledge in light of these new technological innovations.

Asking students to wrestle with these deeper questions builds their critical thinking skills and helps equip them to think more carefully about the ethical uses of AI, how they want to incorporate it into their education, and how they view the information they glean from it.

Questions to consider regarding incorporating AI into a class:

- What do I hope students will gain from this experience? How might this use of AI be mapped onto other experiences outside of the classroom? In the workplace?
- What have the makers of these AI applications designed them for? Do those intentions align with the goals of my assignment and/or class?
- How does my discipline define the kind of information we consider authoritative and why? How do uses of AI conflict or complement those definitions?
- Would I expect students to use Google or another search engine in a similar format? If students are already using the internet for work in your class, then consider how AI might enhance that experience or diminish it. The applications' conversational models often

obfuscate where information is coming from — consider how that quality should be addressed in the class.

How do I discuss and set expectations for my class?

As instructors determine the extent to which AI tools may serve the learning goals of their courses, it will be important to not only establish clear policies for appropriate and inappropriate uses of AI but also to make a point to discuss those policies, and the thinking and values that guide them, regularly with students as the semester progresses. In general, focusing on what students have to learn in a particular course and in particular assignments, and being explicit about why that learning is important can create a framework for meaningful and authentic student engagement.

Some ideas and suggestions for doing so:

- Lead them in a discussion about Academic Integrity, using Samford's documented policies
 and stated values, to define a broader context for practicing Academic Integrity in your
 specific class. From there, you can build a set of guidelines or rules and return to them as you
 give them assignments to discuss how the rules apply to the immediate task.
- If you plan to limit or prohibit use of AI, be clear about your reasoning. In courses where students are practicing and developing writing skills, for instance, engaging authentically in the various stages of the composing process is a key part of learning that writing can generate new ideas. In other courses, original interpretation of data may be an essential component of developing a particular professional skill (e.g., legal writing that interprets authority, patient care responsibilities or recommendations). Be explicit about the learning goals for the course overall and for specific assignments, so that students understand how using AI could shortcut their learning.
- If you plan to invite students to use AI, set clear expectations:
 - Teaching: Identify the range of capabilities of the tools by defining appropriate and
 inappropriate uses, one assignment at a time. If they can use AI to produce an outline, but
 the text of an essay must be in their words, clarify that on the assignment directions and
 tell them why.
 - Modeling: Spend class time demonstrating how AI can be used for a task. If students are drafting research questions, for example, you might show them how an AI tool can help to identify what kinds of information would be useful in answering a particular question. Building in class time for students to practice using it or collaborate by working in groups can give them hands-on practice while you're there to answer questions.
 - O Documentation of usage: One strategy for teaching them to use the technology thoughtfully is to have them footnote or otherwise document where they used it to generate part of an assignment and to name what prompts they used. Most tools keep track of user prompts and the answers they generate, but students should be keeping a record of their use and be willing to share their process of arriving at a particular solution or response. Many instructors are advocating treating it in the same way as other preexisting text students might incorporate into their writing and to document it as such.
 - Reflecting: Building metacognition improves learning, but it also prevents cheating. Assigning students post-project reflections that ask them to describe their use of technology to complete particular tasks will increase their understanding of how the tools work and provide a mechanism of accountability as they think through how their own learning was enhanced or diminished by the use of a tool.

How do I engage with a student that I suspect has used AI in an unauthorized manner?

Taking the recommendations offered in this guideline into account, it is likely best to begin with dialogue and expressing your concerns with the student in a non-accusatory manner. As you prepare for your student interaction, reflect on what leads you to believe or suspect unauthorized AI use has occurred. Try to rely on multiple strategies along with your instinct, not just your instinct. For instance, did plagiarism detection software alert you, or do you also have corroborating information such as metadata from the document? Or, does the submitted work not match the same student's writing style you collected at the beginning of the semester? Does the student seem uncertain or provide incorrect responses to questions you ask about their work? (see question prompt "What resources and strategies can I use to investigate potential misuse of AI?"). If responsibility is determined, refer to your course syllabus and the student handbook for guidance on how to proceed. Ensure proper documentation and confidentiality are preserved.

What resources and strategies can I use to investigate potential misuse of AI?

Despite the availability of various resources and strategies to detect AI usage (discussed below), it is essential to acknowledge the limitations inherent in asserting with certainty that a student has employed AI assistance. AI technologies have vastly evolved making it increasingly challenging to distinguish human-generated content from machine-generated content.

Plagiarism Detection Software: Advanced plagiarism detectors like Turnitin or Grammarly analyze writing styles, vocabulary use, and potential matches with published content to detect paraphrased or synthesized text which is sometimes generated by AI writing tools. Do not expect these tools to provide a conclusive determination regarding a student's use of AI; rather, use these tools to inform further investigation.

- Turnitin <u>turnitin.com</u>
- GPTZero gptzero.me
- Winston^{ai -} gowinston.ai
- Scribbr scribbr.com

Writing Style Analysis: AI-generated text may have distinguishable patterns (e.g., lack of personal voice, overuse of adjectives and synonyms, or unusual phrasing. Use of software to analyze these patterns and/or comparison to a student's previous work may be helpful.

• **PlagScan** – plagscan.com

Document Metadata: The creation, modification, and last access times of a document can sometimes reveal inconsistencies. For example, the length of time between the creation and last access dates of a long document may be a cause for concern.

• View or change the properties for an Office file

Knowledge Assessment: Engaging students in discussions about their work, asking specific questions regarding research, writing process, and conclusions drawn may reveal inconsistencies between the work submitted and the student's apparent knowledge.

Where can I go to learn more about AI tools?

There are many resources that can assist faculty in their efforts to better understand AI tools and possible classroom uses. For example:

- OPEN AI has its own resource that summarizes how faculty might use the software: https://openai.com/blog/teaching-with-ai
- Auburn University maintains very thorough and well-organized page for information relevant for faculty:
 - Auburn University Guidelines for Writing Teachers and Writers: https://auburn.edu/academic/provost/university-writing/resources/?tag=Artificial%20Intelligence
 - Auburn University General Overview: https://biggio.auburn.edu/programs/artificial-intelligence
- Georgetown University hosts a blog that provides links to key legal documents related to AI, the classroom, and copyright law: https://cset.georgetown.edu/article/what-were-reading-on-ai-regulation/
- Harvard University hosts a page that promotes cutting-edge research focused on issues related to AI and Ethics: https://cyber.harvard.edu/topics/ethics-and-governance-ai
- Oxford University hosts a page that publishes cutting-edge research on the future of AI, with many articles related to how this technology will influence the classroom: https://www.fhi.ox.ac.uk/
- Fast.AI provides a more immersive experience, including courses that help faculty integrate the use of AI in the classroom: https://www.fast.ai/

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