Using Generative Artificial Intelligence as an Academic Tool

Generative Artificial Intelligence, or GenAI, is a tool that can generate text, images, or other content. This handout includes ideas on how to use GenAI to support or supplement academic studies. For tips on how to write GenAI prompts, view the Academic Center for Excellence's "How to Write an Effective Generative AI Prompt" handout.

Remember:

- Verify any information received from GenAI by using trusted sources, such as Germanna Library databases, before using it.
- Check a professor's GenAI policy before using GenAI for assignments.
- Properly cite all GenAI content used for academic purposes. View ACE's "Generative AI Citation Guide" to learn how.
- Be cautious about entering personal information into GenAI.
- Be aware that when uploading original content to GenAI there is a risk that it can be shared with others.

Writing

GenAI can be a useful tool for brainstorming and organizing ideas. It can also be used to review elements of grammar in a draft. For example, ask GenAI whether a comma is needed in a sentence or if all the subjects match the verbs in a paragraph.
GenAI model suggestions: Claude, ChatGPT, Google Gemini, Microsoft Copilot

Information Technology

GenAI can be used to assist with debugging code or explaining what a chunk of code does. GenAI can quickly catch a missing semicolon or incorrect capitalization that is causing problems in a program.
GenAI model suggestions: Codeium, ChatGPT, Google Gemini, Microsoft Copilot

Math

GenAI can break down a math problem into steps. It can then explain how to complete each step; however, the actual calculations that GenAI generates may be incorrect. GenAI can also be used to explain how to use Excel, StatCrunch, or a TI-84 calculator.
GenAI model suggestions: Google Gemini, Microsoft Copilot, Perplexity, Claude

Studying

Ask GenAI to create study materials to use when preparing for entrance exams or tests, or for practice with a skill. Use it to generate practice questions, develop study plans, or to simplify difficult-to-understand concepts. GenAI can also make learning more engaging by asking it to assume a persona. Cell respiration may be more interesting when your favorite movie character explains the concept.
GenAI model suggestions: ChatGPT, Google Gemini, Microsoft Copilot

Research

It is advised to only use GenAI for jumpstarting the research process, as it may provide outputs that contain incorrect information. For example, GenAI can be used to help find effective keywords to conduct database searches.
GenAI model suggestions: Perplexity, Claude, Google Gemini, Microsoft Copilot,

Accessibility Tool

Specific models can be used to assist with text-to-speech or speech-to-text, break down complex tasks into more manageable pieces, and help with time management. Writing a five-page research essay is less intimidating when you have a list of smaller tasks needed to complete it.
GenAI model suggestions: Goblin.Tools, ChatGPT, Microsoft Copilot, Google Gemini

Multi-Media

Along with text generation, GenAI can also generate images, videos, music, and other multi-media content. This is an area where users can get creative with GenAI and create the perfect image for any presentation.
GenAI model suggestions: Microsoft Copilot, Pika, Suno AI, Ideogram.ai, Gamma

More Information

For more information about GenAI, visit the Academic Center for Excellence's "Generative Artificial Intelligence" web page, which includes resources on prompt writing, GenAI citation, and understanding GenAI on a deeper level.