

D STUDENT GUIDE

The purpose of evaluating student work is not merely to assign grades and degrees. Instead, it is primarily to help students differentiate between what they know and what they still need to learn. Students begin with no or very little understanding. Through experience and the hard work of learning, students can close this gap in understanding until they show a level of competency similar to early stage practitioners. Grades or marks in a course merely reflect the state of a student's gap in understanding between these two positions. AI tools can help you learn how to close this gap or they can do it for you. You only truly benefit from the former.

Important actions:

- You should check with your teacher to find out if use of generative AI is permitted for a given assessment or course.
- If you use AI tools, you should always include a statement about how they were used in completion of the assignment.

D.1 What is generative AI?

Generative AI refers to a kind of artificial intelligence software that is capable of generating information in response to prompts. The software is trained on source data, and uses that training data as input to a sophisticated model that predicts the appropriate response to the prompt. It does not understand the prompts, but it produces a convincing simulation of understanding. Examples of generative AI systems that use text include ChatGPT and Bard, and generative AI models capable of generating images include Midjourney and DALL-E.

D.2 Risks of generative AI

Accuracy If you are using generative AI tools for learning then you should always double-check the content. For example, if you are assigned to write a program that uses a specific algorithm, AI tools may generate a solution that arrives at the correct answer but does not use the required algorithm. If you use generative AI to assist in the creation of assessed content then you are responsible for the accuracy and correctness of the work that you submit.

Quality Content generated may be of poor quality, and generic in nature. Code may have security flaws and may contain bugs. It is important that you understand how any generated code works and you evaluate the quality of the content.

Learning Generative AI can be a powerful productivity tool for users who are already familiar with the topic of the generated content because they can evaluate and revise the content as appropriate. Tasks assigned by your teachers are designed to help you learn, and relying on AI tools to complete tasks denies you the opportunity to learn, and to receive accurate feedback on your learning.

Over-reliance Using AI tools to do your work for you may achieve the short-term goal of assignment completion, but consistent over-reliance on AI tools may prevent you from being prepared for later examinations, subsequent coursework, or future job opportunities.

Motivation Some students may experience lack of motivation for tasks that generative AI can complete. It is important to understand that you need to master simple tasks (which generative AI can complete) before you can solve more complex problems (which generative AI cannot complete). Stay motivated!

D.3 Examples of permitted use

Despite the risks of using AI tools, you will use them in industry after graduation at your job. Therefore, you should learn to use them appropriately so you receive the most long-term benefit. As a student, these uses are mostly centered on helping you understand course material. This includes asking generative AI to:

- Explain a given topic, or to provide an example of how programming constructs are used.
- Explain your program one line at a time.
- Produce an example that is similar to assignment questions.
- Explain the meaning of error messages
- Generate code to complete tasks that you have already mastered from previous coursework.

D.4 Examples of inappropriate use

There are often times when using AI tools are not permitted. Examples of these uses are:

- Asking generative AI to complete an assignment for you – that you were meant to complete – where it can generate an entire solution when you don't understand it.
- Using AI tools on official assessments where uses have been expressly forbidden, such as invigilated exams where the purpose is to determine your individual understanding of the material.
- Any use that may prevent your personal academic growth or may prevent you from understanding a topic or idea.
- Writing a code solution in a language you know and then asking an AI tool to translate that code into the language required for the assignment. In this case, part of the assignment's value to your learning is to better understand the required language, which you would be missing out on.

D.5 Impact on others

There are many consequences to inappropriate usage of AI tools. Some of these consequences may be unintended, and could potentially harm others. For example:

Other students You could expose other students to harm by preventing their learning or including content in a group assignment that violates academic integrity.

Faculty Violating academic integrity standards through the use of AI tools requires time and energy, and is emotionally draining to teachers and administrators, to enforce these standards.

Institutional Including code from AI tools that you do not understand could expose the university to loss of reputation or even financial harm through lawsuits.