Use of artificial intelligence (AI) at the Faculty of Medicine

The UiB guidelines for [integrity and cheating](https://www.uib.no/sa/164162/reielegheit-og-fusk) have been updated. These also discuss the use of [artificial intelligence](https://www.uib.no/student/164404/verkt%C3%B8y-basert-p%C3%A5-kunstig-intelligens-i-utdanning). However, we see that students at the Faculty of Medicine need some clarification on this topic.

AI is an exciting and useful technology that can contribute to both learning and development for you as a student provided that you use it wisely. It is important to be aware of the ethical, legal and professional framework for AI-based tools. Keep in mind that no AI tool is truly intelligent – they're just good at imitating human intelligence. A text generation tool is trained to answer your questions anyway. If it can't find the answer in its database, it will be "creative" and answer something that it thinks might be true. If you criticize the answer you get, it will correct its original answer, even if you may be wrong. Although it is called artificial intelligence, such tools are not particularly intelligent. They struggle to distinguish between evidence-based facts and unsubstantiated claims, so-called "fake news". In addition, they mainly use data and sources from Western, English-speaking countries and are currently poor on gender balance, cultural differences, and ethnic variation.

You can use this type of tools to increase your own learning and development, as well as learning to be critical to the answers. It is also worth noting that the various AI-tools available on the market are good at different things. ChatGPT-3.5still has the best language model and is the most creative, while Bing, Bard and ChatGPT-4 is better at up-to-date knowledge, references, and citations, because it uses the internet as a source. Grammarly is suitable for controlling grammar and spelling, Deepl for translation, while Elicit and Jenni are made for scientific summaries. These are just a few of the AI tools that have emerged in the past year. The various solutions will rapidly be more advanced and better at integrating more functions into the same model **(multimodal models or foundation models).**

**Remember that you are here to learn and that it is neither appropriate nor confidence-inspiring to rely on AI to find answers to all questions in a busy professional life.**

**Here are some examples of what students can use AI for:**

* **Ideas and inspiration**: AI tools (e.g.: ChatGPT, Bing or Bard) **can be used** to create a suggestion for a text based on a topic or question. This can help you to find inspiration, arguments, examples, or sources for assignments. [You must nevertheless be critical to the text produced, and always refer to the tool used](https://forskning.no/kunstig-intelligens-utdanning/bor-chatgpt-og-kunstig-intelligens-brukes-i-utdanning-ja-mener-forsker/2239431).
* **Improve language**: You can use various tools to check grammar, spelling errors, word choice or style in your text (eg: Grammarly, ChatGPT, Bing). [However, keep in mind that the tool does not always provide correct or appropriate suggestions, so](https://www.uib.no/student/164404/verkt%C3%B8y-basert-p%C3%A5-kunstig-intelligens-i-utdanning) all proposals must be critically assessed.
* **Learn new things**: You can use AI tools (e.g.: Bing, ChatGPT) to get a general overview of a new topic, subject, or topic.
* **As a study buddy: You can make a chatbot (ChatGPT, Bing or Bard) ask you questions** from the syllabus, or to give you examples of different exam questions you can solve alone or with fellow students. [Be skeptical to the answers given. Keep in mind that they may be taken from a different curriculum and/or medical practice than the one currently used in Norway](https://khrono.no/kunstig-intelligens-i-utdanning-og-laering/817527). The less you know about a topic, the more difficult it will be to verify the quality of the information you receive. It may be a good idea to compare with a textbook or other quality-assured source provided by the instructor. Ask for constructive feedback on you own texts.
* **Practice of clinical situations, dialogue and diagnostics: You can ask a chatbot to create a role play or clinical task you, where you are the doctor/dentist/nutritionist, etc. Together, you can create a dialogue that will lead to a diagnosis, the right treatment or the right drug. An example of such a prompt could be: 'Give me a fictitious blood test result and anamnesis of a patient who is in an emergency department and has a defined diagnosis. I will try to reason and guess the diagnosis from the blood tests. Give me feedback when I’m done**." **The more specific you are, the better it responds. It takes some practice to excel at making such prompts.**
* **To help you organize your student life. For example, you could ask it to make a schedule for getting through the syllabus in time for exams that matches your other activities.**

**AI tools cannot be used for:**

* Accept the information without checking whether it is correct
* Construct data, images or movies without indicating that AI has been used
* Copy text directly without clearly indicating that it comes from an AI tool
* Submitting personally identifiable information
* Write exams, home assignments, bachelor's and master's theses with text that is fully or partly generated by AI (unless otherwise stated)

[Academic integrity and Cheating | Division of Student and Academic Affairs | UiB](https://www.uib.no/en/sa/165062/academic-integrity-and-cheating)

<https://www.uib.no/student/164404/verkt%C3%B8y-basert-p%C3%A5-kunstig-intelligens-i-utdanning#plagiat-og-fusk-nbsp> (not in English yet)

[Student Use Cases for AI | Harvard Business Publishing Education](https://hbsp.harvard.edu/inspiring-minds/student-use-cases-for-ai)

[ChatGPT and artificial intelligence in higher education: quick start guide - UNESCO Digital Library](https://unesdoc.unesco.org/ark:/48223/pf0000385146)

[AI Will—and Should—Change Medical School, Says Harvard’s Dean for Medical Education | Medical Education and Training | JAMA | JAMA Network](https://jamanetwork.com/journals/jama/fullarticle/2811219)