

Department of Mathematics

Statement on Plagiarism and use of Generative AI

October 2025

What is this document about?

The purpose of this document is to state and explain the rules that will be used in the LSE Mathematics Department around using external help in different types of assessment, with a focus on the use of generative AI (large language agents such as ChatGPT, Claude, Gemini, Grok).

Summative assessment is any type of assessment that counts towards the final mark of a course. It is assessment **of** learning and primarily plays an evaluative role in your education. This includes of course formal exams, but also assessed coursework, individual or group projects, dissertations, etc.

Formative assessment is assessment for which you (can) get a mark and feedback, but which doesn't count towards the final mark of a course. It is assessment **for** learning and primarily lays a developmental role in your education. In our department many courses have weekly coursework that you are encouraged to submit; in other departments you may have online quizzes, class presentations, etc.

Continuous assessment combines both summative and formative functions and means that your participation in formative assessment, class activities, etc., is used to determine a part of the final mark for a course (usually a small part). Since this type of assessment comes in so many flavours, you should ask the lecturer of a course how exactly the rules in this document apply for continuous assessment in their course.

Plagiarism is presenting (part of) a piece of work as though you are the original source, when you are not. This includes not just direct copying of sources, but also rewriting these sources in your own words or just using ideas from other places. These other sources are not just written texts; it can also be material you found on the internet (articles, images, videos, podcasts, etc.), work from other students, and suggestions and answers provided by generative AI.

In principle, if any content from external help makes its way into your work, and you do not clearly declare its origin, you are plagiarising.

The Rules

Summative Assessment

Unless explicitly stated otherwise (for instance on the course Moodle page), **you may not use any external help (including using generative AI) for**

any piece of summative assessment in courses from the Mathematics Department.

As explained above, if you use external help and don't declare it, you are plagiarising. The Mathematics Department reserves the right to conduct interviews after the submission of an assessment, to determine whether plagiarism has occurred. These interviews may be random or targeted (based on observations during marking). Where we conclude that plagiarism has occurred, we will normally issue the penalty of awarding zero for that assessment. You may contest this by requesting a formal Assessment Misconduct Panel. In more serious cases, we may examine your past submitted assessments and/or proceed directly to an Assessment Misconduct Panel, which can issue more severe penalties such as punitive zeroes in related assessments or courses.

There may be occasions where we want to test your ability to use AI (perhaps in a limited way) to solve a problem. In such an assignment, a large part of what we are testing is if you can tell whether AI is producing something sensible, and if you can step in to correct or improve the AI output. In any such assignment there will be clear rules how to report what you have done, including how you used an AI agent.

Formative Assessment

Formative assessment is meant to help you learn the material in a course, and anything that assists you in that learning process is in general allowed. For instance, reading additional literature or watching videos on the topic of a course is fine. Working together with other students can also be a good way to study, but it only really helps your learning if in the end you complete the assessment yourself. Copying from another student is not going to be much use in helping you understand the material. But exchanging ideas, working out suggestions, etc., and then write it all out in your own words, can be a great way to make the material your own.

Using generative AI is a rapidly developing area. It can be a useful tool. But the danger is that you just ask it to solve one of your coursework questions or give the outline of your essay, and that you then write down what was given by the AI, with no or little contribution from yourself.

For that reason, unless stated otherwise (for instance on the course Moodle page), **you must declare the use of generative AI for any piece of formative assessment**. More precisely, you must give a short description how you used it, that should be written by yourself, not by the AI, and give the link to the saved log of your interactions with the generative AI agent. (Claude calls this a "chat". When you click the "Share" button, you get the option to share it with anybody in LSE, and that will give you a unique link; e.g. claude.ai/share/ac64509d-ded7-4f60-837c-86be79978331.)

Continuous Assessment

As explained earlier, continuous assessment is in essence a mixture of

summative and formative assessment, and we cannot give general rules for these cases. If you are in a course that has continuous assessment, **you should ask your lecturer** what the situation is regarding external help (including using generative AI).

In the remainder of this document we want to tell a bit more about the reasons for these rules, why AI use might be unhelpful to your learning and the quality of your work, and ethical concerns in the creation and use of today's AI models.

Reasons for the Rules

Your degree certificate is intended to certify that you personally have an understanding of the material we teach, and that you can work with it effectively. If you get your grades via external help with (summative) assessments, this will no longer be accurate.

Generative AI is good at, and useful for, certain things, for instance in assisting with internet searches. This is valuable, and will be valuable in your career, but being able to use AI solve a problem is not the same as understanding that problem. If you give generative AI a problem which is genuinely new, or which is complicated enough to need bringing together a lot of known ideas in a new way, it often fails (although usually it will give a response that *looks* good). We would like to train you to be a person who can at this point step in and deal with the problem.

At the same time, generative AI is unreliable. Generative AI agents are not designed to answer questions. Instead, when you ask it a question it will generate a statistically likely response to the question “What should an answer to this query *look* like?”. This is not the same as answering the query. It might give you what you are looking for; it might not. The tendency to be horribly wrong goes up the more substantial or novel a task is. Badly wrong answers will attract low marks no matter how convincingly they are written, and uncritical reliance on AI can lead to your believing wrong ideas. In addition, some research has shown that student results and understanding are better the less generative AI is used (see, for instance, this recent paper: arxiv.org/abs/2506.08872).

It is very hard to set assignments which are sufficiently novel or complex that generative AI will routinely fail. If we would try to do this all the time, we would have no time to do anything else. This is why our default position is to ban the use of generative AI in any summative assessment. We understand, and support the idea, that you will want to use AI critically to perform tasks in your future career. But most of the time what we want to test is that you have the capacity to think for yourself.

If you use generative AI for formative assessment, we want to see how you used it so that we can assess if and what you learned when writing your answers.

Further Clarifications

Honesty is always a defence against plagiarism. If you complete some summative assessment using outside help, including using generative AI, and declare that fact with your submission, you have not committed plagiarism, even if it was banned for the assessment. In such a case we will consider what your work is worth given the external help. We will be fair, but warn that if the assessment is intended to test a certain competence, and this competence came (mostly) from the external help, you cannot expect a high mark.

Most summative assessments in our courses are examinations. Since you have no access to external help in written exams, this document does not apply (illicit access to external help in exams is its own separate offence) to such assessments.

If you are not sure whether something is allowed or what exactly counts as plagiarism, ask your course convenor. We do not want to punish honest mistakes, so if you are not sure, ask.

Ethical Considerations

We think you also should be aware that generative AI is far from a neutral tool. While AI models usually do not have deliberately built in biases, they learn biases from their training data and perpetuate them. They also take in information uncritically and may well express dangerous or unpleasant viewpoints.

The use, and especially training, of generative AI requires very substantial computations and hence requires large amounts of energy. This is a significant contributor to production of greenhouse gases.

Most commercial generative AI models are in part trained using data acquired in dubious, or illegal, ways. The creative work of authors and artists goes into providing the answers you ask for, but these sources don't get any benefit from that use of their work.

Finally, most generative AI tools use material that you provide to them to train future models. If you input copyrighted work you are at risk of violating copyright laws. If you give them personal information, it may become part of the AI model and hence be shared with others.