Guidelines for the use of generative AI tools in teaching and in writing dissertations and doctoral theses

Contents

Introduction

The definition of AI (Artificial Intelligence) is complex, and in these guidelines we will use the one from the AI Act of 2024. This Act defines an AI system as "an automated system designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments" (Art. 3, para. 1 of EU Regulation 2024/1689).

Recent developments in the field of AI from 2022 to the present have made highly advanced tools accessible to users, especially with regard to **generative AI** ("AI"). Generative AI can be defined as "computational techniques capable of generating seemingly new and meaningful content such as text, images or audio from training data". (Feuerriegel et al., 2024).

 These systems are not limited to analysing and processing existing information, but are capable of producing original outputs that are difficult to distinguish from the work of a human author.

As these recent tools are evolving rapidly, it is still difficult to assess their potential and limitations in a comprehensive and accurate manner. On the one hand, they create new opportunities to strengthen and partly automate creative processes through the continuous expansion of the range of AI tools available and systems integrated into commonly used software and databases.

- In particular, as the resources and time available to university teachers and students are limited, the use of AI promises to increase productivity (Liu et al., 2023). This is particularly true through the outsourcing of repetitive and mechanical tasks and processes to AI and the exploitation of AI as a tool to improve learning experience, research efforts and the analysis of textual documents.
- On the other hand, if used improperly, generative AI can degrade the quality of education (Bond et al., 2024) and undermine the rigour and impact of academic research (Messeri & Crockett, 2024). Much depends on the specific pedagogical or intellectual context in which generative AI tools are used and the ways in which these tools support or undermine learning outcomes.

With these Guidelines, the University Teaching Committee, in accordance with the provisions of the document "University of Padova Policy Guidelines for the Responsible Use of Generative Artificial Intelligence in Teaching and Research" (Academic Senate resolution no. 76/2025), aims to state, as clearly as possible, what the University considers to be appropriate or inappropriate use of AI in teaching and in writing dissertations and theses. The University supports and encourages the use of AI tools by its community, but also wishes to highlight the limitations and risks that their use may entail.

The focus is mainly on publicly available AI tools, regardless of their scope of application (general or specific) and the type of input/output generated (e.g. text, images or data). The guidelines also extend to AI tools accessible via plugins within software and include both online and offline use of publicly available AI tools, even in closed environments.

This document refers to *University tools or software*: these are applications made available to university teachers and/or students through the Digital Learning and Multimedia Office or the IT and Computerized Services Area (ASIT) of the University of Padova that comply with current regulations.

Some points in this document may be subject to updates, given the rapid evolution of these technologies/methodologies and depending on any agreements between Unipd and generative AI providers.

These guidelines are supplemented by the "**Instructions for the use of generative AI tools in teaching and in writing dissertations and doctoral theses**", which offer practical advice, examples, and user experiences to support their application.

Note: we have used ChatGPT4o (March 2025) to check for any unnecessary repetitions.

General principles

The use of AI tools in academia must always follow certain general principles which are listed below.

User responsibility

University teachers and students are **fully responsible for the use of outputs** generated by AI tools and for the accuracy of the processes in which these tools are used. Responsibility cannot be transferred to AI: those who use it can be held responsible in the event of misuse, such as violations of scientific and editorial integrity standards (plagiarism, failure to cite sources, etc.).

> This rule is consistent with the position of the *Committee of Publication Ethics (COPE)*, according to which "authors who use AI tools in the drafting of a manuscript, in the production of images or graphics for publication, as well as in the collection and analysis of data, must be transparent in indicating in the Materials and Methods (or similar section) how the AI tool was used and which tool was used.
>
> Authors are fully responsible for the content of their manuscript, including parts produced by an AI tool, and are therefore responsible for any breach of publication ethics" (*COPE position - Authorship and AI*). Furthermore, *The European Code of Conduct for Research Integrity* (ALLEA) expressly requires that "researchers report their results and methods, including the use of external services or AI and automated tools, in a way that is compatible with the accepted norms of their discipline and that facilitates verification or replication, where applicable" (2.3).

The irreplaceable nature and value of human contribution

Originality of thought and creative input from university teachers and students is the foundation of academic life and is an irreplaceable driving force.

Generative artificial intelligence tools can certainly offer ideas, suggestions and opportunities to rework concepts effectively,

sometimes leading to new ideas. However, they should be viewed as **supporting and enhancing learning and teaching processes**, not replacing them. The importance of human critical thinking must remain at the heart of the process: interaction with these tools should promote, not eclipse, original intellectual contributions. Even in the stages of teaching planning or the drafting of academic texts, such as dissertations and theses, AI can aid in organising thoughts or offer provisional formulations, but the academic value of the final product lies in the student's ability to integrate, evaluate and reinterpret these tools in light of their own skills and knowledge.

Review of outputs generated by AI tools

The outputs produced by AI tools must be **checked carefully**. The greater the processing capacity of AI tools, the greater the level of review required by the user, especially in cases where the output could have significant consequences.

In particular, the following must be carefully reviewed:

- the **reliability** of information (by examining the original sources and verifying data, facts and bibliographical references);
- the **lack of bias** in the outputs, ensuring that the results are in line with the set of values adopted by our University in its regulations (Statutes and Regulations);
- **compliance with citation rules**, to avoid violations of copyright and scientific integrity.

Awareness of the limitations and disadvantages of using AI tools

Users must be **aware** that, in some contexts and in certain circumstances, the use of AI can be detrimental. For example, generative tools can produce generic or inaccurate texts, provide incorrect or non-existent sources, and generate content that may be perceived as offensive, distorted or hallucinatory.

Sensitive data and restrictions

With the exception of University tools deemed appropriate, the following types of data must not be included in AI models:

- **personal data** (i.e. any information that can directly or indirectly identify a person), except for data strictly necessary for the generation of optimised output (e.g. research or study location, if useful for the purpose of providing a more relevant response to the request);
- **data protected** by intellectual property rights or subject to research promotion agreements;
- **sensitive data** whose use could have problematic ethical consequences, such as the risk of discrimination or stigmatisation;
- **data covered by confidentiality agreements** or originating from funding bodies with restrictions on sharing;
- **data protected by copyright** or third-party database rights, unless expressly authorised.

It is advisable to check and change the privacy settings of AI tools before using them.

The Lucrez-IA chatbot has been available to university teachers both on the web (lucrezia.unipd.it) and on the moodle course pages of each course unit since February 2025: the Amazon AWS/Claude Anthropic provider has assured us that this chatbot is designed to operate according to a strict set of ethical principles and guidelines that govern its behaviour [see Lucrez-IA guidelines].

Transparency in the use of AI tools

The use of AI-generated content in documents authored by students and university teachers (e.g. assignments, dissertations, theses, lecture notes, articles) could lead to plagiarism and, in any case, to a lack of transparency at academic level. In contexts where AI support is useful (written assignments, exercises, dissertations, and doctoral theses), students are required to clearly state the AI tools used, the version, the date and, preferably, the prompt, following the guidelines of the MLA style center o APA. In addition, any copyrighted material used as part of the user prompt should also be explicitly cited.

This involves a detailed description of the user's use of AI in the relevant sections (e.g., in "Materials and Methods" or "Bibliography" in the case of a dissertation or thesis, or in the section "Planned learning activities and teaching methodologies" for study courses).

In any case, the name and version of the AI tool used must be specified, indicating, if necessary, the prompts used and the outputs generated.

This requirement applies in particular to dissertations and theses, as well as to any teaching materials made available, such as handouts or slides shown in class, in which the extent of the contribution directly linked to the use of AI tools must always be **indicated, wherever it is found.**

Compliance with internal regulations and editorial guidelines

During teaching or when writing dissertations or theses, University teachers and students must follow these guidelines and, where applicable, must comply with the regulations of their Department or School on the use of AI tools.

They must also pay attention to the provisions of the Student Career Regulations and the University Regulations for PhD courses regarding disciplinary responsibility.

Use of AI tools in writing and reviewing

It is not permitted to use AI tools to write significant portions of any kind of academic work, from the text of a dissertation or thesis to that of a peer review. However, the use of AI is permitted for:

- helping main authors to generate **feedback** on their work;
- improving the linguistic wording of an already written work, provided that the confidentiality of the information processed is ensured.

Use of AI in assessment

AI should be used as a tool to support human judgement, not to replace it. In addition to the general principles set out in this section, the following guidelines must be followed when using assessments obtained, whole or in part, through AI tools:

- teaching staff must use the tools provided by the University, or other tools that comply with the guidelines provided herein;

- students must be made fully aware of any use of AI in assessment processes and must be given the reasons for this particular choice. For example, in the Perusall University application, AI makes it possible to assess the content of thousands of comments in French/Italian/English/German, and this constitutes only a small part of the overall assessment of the educational activity;

- AI tools must be regularly checked for accuracy and fairness, identifying any possible application errors;

- AI-assisted assessment practices must be adapted, taking into account the results obtained and the feedback provided by students.

Learning outcomes, academic integrity and examinations

Learning outcomes

It is advisable to reflect on both learning outcomes and how learning should be assessed and validated in order to turn a potential risk into an opportunity. For example, in the text "Teaching with AI" (Johns Hopkins University Press, 2024) José Antonio Bowen and C. Edward Watson suggest focusing more on the top of Bloom's pyramid (Create, Evaluate, Analyse) rather than the bottom (Remember, Understand, Apply), as the skills at the bottom are or will soon be achieved by AI. At the same time, while AI tools may overtake human performance, fundamental skills in literacy, numeracy and basic scientific knowledge will remain essential for future education.

The scope and nature of these fundamental skills will need to be regularly reviewed to reflect the increasingly AI-rich environments in which we live (see the UNESCO document "Guidance for Generative AI in Education and Research").

Academic integrity

The effects of AI in educational and overall assessments go beyond immediate concerns about the risk of its unauthorised use in written work. In fact, in some areas AI is capable of producing relatively well-organised texts and essays, and of passing some knowledge-based exams in specific subject areas. The issue of academic integrity and plagiarism has existed since well before the advent of AI, but AI has the potential to significantly exacerbate the problem.

For example, at Penn University, integrity violations to gain an "unfair advantage over fellow students" increased sevenfold in the 2022/23 academic year, partly fuelled by the unauthorised use of ChatGPT in the early months of its existence (The Daily Pennsylvanian).

Examinations

Guidelines issued by various universities (Harvard, MIT, UNSW, ...), international organisations (UNESCO, UNESCO International Institute for Higher Education in Latin America and the Caribbean, ...) and scholars in the field (including Chris Dede, Senior Research Fellow, Harvard Graduate School of Education) suggest some changes to examinations and university assessment in the age of AI.

Shifting the focus from the product to the process

AI is capable of producing formally correct results: texts, answers, codes, demonstrations. However, there is often a lack of understanding as to why and how those results are achieved.

We suggest:

- assessing the intermediate steps, the choices made, and the reasoning behind the answers;
- asking students to comment on or make a note of their reasoning;
- requesting documentation of the process followed by the student, including any details on how and whether they used AI tools.

Developing and assessing critical thinking

AI can generate plausible but incorrect or superficial content. The ability to critically evaluate the reliability and consistency of content is needed. We suggest:

- proposing AI-generated texts to be analysed, corrected or discussed in exams;
- assessing the ability to reflect on the process followed by the student: "What do you think of the process you followed? What would you have done differently?".

Practical oral tests

By their very nature, oral or practical tests cannot be easily replaced by artificial intelligence tools.

We suggest:

- including oral examinations with adaptive questions to react in real time to the student's answers;
- carrying out assignments in the classroom in a controlled environment;
- assigning small projects with a final oral discussion on the work done.

Tasks that explicitly include the use of AI

AI will be an everyday tool in the world of work.

We suggest:

- assigning tasks in which the use of AI is allowed or required, with the request to declare and justify its use;
- asking students to compare their own work with that generated by AI and to reflect on the differences;
- assessing not the final result, but the ability to interpret, correct and supplement what has been produced by AI.

Continuous assessment: overall and multidimensional

A single written exam does not allow for the assessment of the complexity of learning and may not allow for authentic assessment in the AI era.

We suggest:

- using multiple assessment tools: written tests, guided assignments, peer review and oral examinations;
- introducing peer assessment, which is also useful for developing awareness and critical thinking;
- assessing transferable skills as well as content (collaboration, communication, adaptability, etc.).

AI detectors

Just as there are no tools capable of identifying papers written for a fee, there are no tools (known as "AI detectors") capable of identifying with certainty the use of AI in drafting a document. The leading manufacturers of AI detectors report a significant percentage of false positives (e.g. Turnitin). Furthermore, specialised websites explicitly offer, at a cost comparable to the best versions of AI chatbots, the guarantee of producing AI detectorproof texts (e.g. Undetectable AI, Chegg), while proper and repeated revisions using AI of a text created with generative AI render AI detectors unreliable (Lu et al., 2023). The University does not currently support the use of such tools.

Limitations and possible issues in the use of AI tools

The use of AI tools offers numerous advantages, but it also has limitations and risks that must be carefully taken into consideration. Here is an analysis of the main issues divided by category.

Models and training data

- *Quality of input data*
  If the data entered into an AI is of low quality (e.g., unrepresentative samples or incomplete metadata), the responses obtained will also be unreliable. This principle, known as "garbage in, garbage out", is crucial in academic research and writing.

- *Influence on future AI responses*
  Some tools may use user interactions to improve the model. If these interactions are used in the training process, they may reappear in future responses, with potentially serious implications in terms of data confidentiality.

Training and learning data in AI models

- *Bias in training data*
  Training data may reflect pre-existing structural inequalities between different social groups (e.g., gender, ethnicity, socioeconomic class). These imbalances can lead to over- or underrepresentation in the data used by AI, with consequences in terms of reliability of the results.
  Data may contain discriminatory language, incorrect information or logical fallacies, especially in large language models (LLMs).
  Some types of data may be influenced by publication bias, favouring positive results and compromising the accuracy of scientific evidence review.

- *Outdated data*
  AI tools may not have the most recent information. For example, the GPT-4.0 model has a knowledge cut-off that does not go beyond June 2024, and DeepSeek-V3 has a cut-off of July 2024. Although AI tools are able to find recent information from a web search, this can be a problem in teaching and in writing dissertations and theses, where having the latest sources is of the essence.

- *Circularity in data*
  With the increase in the use of AI, it is possible that texts generated by
  other models will be reused as training data, with the risk that errors
  will propagate without the possibility of human correction.

- *Varying reliability of sources*
  Training data may come from sources with different levels of
  credibility (e.g. scientific articles vs. blogs). Although models can be
  optimised to distinguish these differences, they do not currently always
  guarantee the implementation of an accurate hierarchy of sources.

Output generated by AI tools

- *Bias in training data*
  AI tools can reproduce biases present in training data, leading to
  discriminatory or inaccurate responses. Even the adjustment of models
  through human feedback can introduce new biases.

- *Reliability and truthfulness of responses*
  As stated in Section 2.3, AI outputs need to undergo thorough checks.
  In particular, some studies show that excessive use of AI can reduce
  the quality of human work, leading users to place too much trust in
  automatic responses without verifying their accuracy (Wenker, 2023).

- *Limited reproducibility of results*
  Generative AI tools can produce different outputs from the same
  input, making it difficult to reproduce research. This is particularly
  problematic when using AI tools for bibliographic research or for the
  generation of educational content made available to students.

Legal and privacy issues

- *Informed consent in research thesis projects*
  If AI is used to analyse data collected from research participants,
  informed consent must include the associated risks. The use of
  undeclared AI tools could invalidate consent already obtained.

- *Legal and privacy issues*
  Training data may contain personal information or copyrighted
  material acquired without authorisation, with possible violations of
  the GDPR and research integrity.

- *Risks of cyber attacks*
  Some cyber attacks (e.g. "Membership Inference Attacks" or "Model
  Inversion Attacks") could make it possible to partially reconstruct
  training data, creating risks to the security of sensitive information.

Transparency and policy compliance

- *Lack of transparency of algorithms*
  It is often impossible to understand exactly how an AI model generates a particular output. This lack of transparency is a problem especially when models establish unwanted correlations with membership connotations (e.g., gender, ethnicity, religion, politics).

- *Privacy issues in generated data*
  AI tools can generate new information that, when combined with other data, could reveal sensitive details about individuals or groups. This raises questions about the very concept of "anonymisation" and the protection of personal data.

- *Risk of plagiarism*
  This risk is already discussed in Section 2.6, which emphasises the importance of always citing sources and indicating the use of AI in one's work. In particular, when writing dissertations or theses, the use of AI must be declared transparently to avoid unintentional forms of plagiarism.

Use of AI tools in writing and reviewing

Entering unpublished ideas into AI tools may constitute their unintentional publication. For example, OpenAI may analyse user interactions to improve its models, which could compromise the possibility of registering a patent.

AI and sustainability

The use of generative artificial intelligence tools has a significant impact also in terms of environmental sustainability. Training and using models require large amounts of energy. For example, generating a single image using a model such as DALL-E 2 can consume around 2-3 watt-hours of energy (Luccioni, Jernite & Strubell, 2024), the equivalent of leaving a 10-watt LED light bulb on for around 20 minutes. When this activity is multiplied by millions of users, the energy footprint grows rapidly.

Training even more complex models, such as GPT-3, required approximately 1,287 megawatt hours (MWh) of energy, emitting between 500 and 600 tonnes of CO_2 – the equivalent of the annual emissions of approximately 50-60 cars (Patterson et al., 2021). In addition, the daily operation of the servers that host these models, i.e. data centres, contributes significantly to global electricity

consumption: it is estimated that data centres currently account for around 2% of global CO_2 emissions, a percentage that could grow rapidly with the expansion of AI use.

The production of the necessary hardware, such as highperformance graphics cards (GPUs), also involves significant consumption of natural resources (rare earths, water) and additional emissions linked to industrial processes.

It is therefore important that users and developers are taught how to use AI responsibly: choosing efficient tools, limiting unnecessary use and supporting initiatives for greener technology will become increasingly essential to balance innovation and respect for the environment.

Guidelines for university teachers

Below are guidelines for university teachers, with details on transparency in the use of AI in their teaching.

Guidelines for university teachers

Reviewing learning outcomes

University teachers are encouraged to reflect on the learning outcomes of each course unit and the degree course in light of developments in AI.

Responsibility for one's work

University teachers have full responsibility for all activities supported by AI.

Promotion of AI as augmented intelligence

We suggest promoting the use of AI as a learning support tool, while safeguarding students' critical thinking and originality
(see the Bo Live interview with Prof. Chris Dede, Harvard University, on 16 November 2023).

Transparency and clarity in teaching rules

University teachers are invited to clearly inform students whether and how the use of AI is permitted in assignments, exams, dissertations and theses, stating the citing methods and specific responsibilities, possibly distinguishing for each course unit. Explicitly state the use of AI in your teaching materials and in any AI-based assessment systems.

Training and support

Lifelong learning courses and workshops are offered by the University to integrate generative AI into teaching.

Checking sources and accuracy

Always check the reliability of information.

Exams and academic integrity

We suggest:

- adopting assessment methods that can distinguish original work from AI-generated writing. We recommend spot checks and/or oral supplements;

- shifting the assessment more towards the process than the product;

- not relying exclusively on anti-plagiarism software (AI detectors), as they can generate false positives and be easily circumvented;

- studying assessment methods that are generative AI-proof, or, conversely, in which generative AI is explicitly allowed;

- justifying, limiting the use of, and monitoring any AI-based automatic assessment tools.

Intellectual property

Make sure that AI-generated content does not infringe copyright or intellectual property rights.

Data protection and privacy

With the exception of AI tools provided by the University, avoid entering sensitive or non-public data (e.g. research results, students' personal information) into AI systems. Check the guidelines or settings to ensure that the tools used do not learn from individual conversations and do not retain memory of past interactions.

Transparency on AI use policies in individual course units

The use of the same AI tool for learning purposes can be useful or harmful, depending on the particular task required and the specific context. In general, the criterion that the AI tool must not interfere with achievement of the learning outcomes must apply. For example, the use of AI to translate a text is useful for an engineering student who wants to read an article in an unfamiliar language, but is generally counterproductive for those who want to learn a foreign language. However, it could also be useful for students who want to learn a new language, for example to improve their translations.

It is therefore impossible to provide guidelines that are valid for all subject areas and in all contexts. The various educational bodies (schools, departments) are encouraged to organise periodic internal discussions on tools and practices at the level of course units. In addition, it would be desirable for each university teacher to explicitly state the specific ways in which AI is considered useful for teaching purposes. In the document "**Instructions for the use of generative AI tools in teaching and in writing dissertations and doctoral theses**", we provide detailed information on a useful tool for this purpose; here, we will limit ourselves to suggesting three models of guidelines to give to students in the syllabus and/or on the Moodle course page.

A · Permissive policy

In this course unit, students are encouraged to explore the use of generative artificial intelligence tools to carry out assignments and assessment tests. The use of such tools must be declared and cited correctly. Each student is responsible for evaluating the validity and relevance of the AI-generated content that is presented; the final responsibility for the work submitted remains with the student. Failure to comply with these guidelines will be considered a violation of academic conduct rules. Please note that different course units may have different policies on the use of AI, and it is therefore the responsibility of students to find out and comply with the specific requirements of each course unit.

B · Intermediate policy (limited/restrictive)

The use of generative artificial intelligence tools may be allowed or even encouraged in some assignments in this course unit. As a rule, the use of such tools is not permitted, unless specifically stated otherwise. In any case, the use of AI must be clearly stated and correctly cited. Each student is responsible for evaluating the validity and relevance of the AI-generated content that is included in their work. As a result, the final responsibility remains with the student.

 Failure to comply with these guidelines will be considered a violation of academic conduct rules. Please note that different course units may have different policies on the use of AI, and it is therefore the responsibility of students to find out and comply with the specific requirements of each course unit.

C · Prohibitive policy

The use of ChatGPT or any other generative artificial intelligence tool is expressly prohibited at all stages of the work process, including the preliminary ones. Any violation of this rule will be considered a form of academic misconduct.

Students are reminded that different course units may have different policies on the use of AI, and it is their responsibility to find out and comply with the specific requirements of each course unit.

We recommend using a prohibitive policy only in special cases, as promoting an informed and constructive approach is preferable to banning AI tools. A survey carried out in five different countries (Brazil, Japan, India, UK, US) shows that 94% of students were already using AI tools in their homework in 2023 (Ibrahim et al, 2023).

Guidelines for students

Below are the guidelines for students.

Essential guidelines for students

Responsibility for one's own work

- Students have full responsibility for all work supported by AI.
- Misuse of AI (e.g., copying & pasting without review or citation) and any violation of the rules outlined in the course units are considered academic misconduct.

Checking sources and accuracy

Always check the reliability of information provided by AI, especially in academic settings, where accuracy is of the utmost importance.

Transparent Use of AI

Always declare the use of AI tools in submitted work, specifying the tool, version and, if required, the prompts used, using APA or MLA: standards examples of this are provided in Section 5.3.

Ethics and Intellectual Property

Make sure that AI-generated content does not infringe copyright or intellectual property rights.

Data protection and privacy

With the exception of any AI tools recognised by the University, avoid entering sensitive or non-public data (e.g. research results, students' personal information) into AI systems. Check the guidelines or settings to make sure that the tools used do not learn from individual conversations and do not retain memory of past interactions.

University training and tools

The University develops and promotes the informed use of generative AI in teaching through the following initiatives:

Teacher training

The University of Padova promotes training programmes for teachers to foster understanding and informed use of generative AI in teaching.

- Technical workshops are organised by the Digital Learning Office with the aim of providing practical skills and technological tools to effectively integrate AI into educational practices.
- Workshops on methodology and teaching are organised by the Teaching4Learning Office. They focus on the pedagogical use of AI to enrich the learning experience, stimulate critical thinking and encourage the ethical and responsible use of technology.

Sviluppo delle competenze di studentesse e studenti
Developing students' skills

Specific courses, workshops and/or MOOCs are offered to students with the aim of developing technical and critical skills in the area of generative AI.

The activities aim to provide solid foundations on the ethical and informed use of AI, with a particular focus on source validation, respect for intellectual property and personal data protection.

Pilot projects and interdisciplinary collaboration

The University will encourage the implementation of pilot projects to explore innovative and constructive uses of generative AI in teaching. These projects will be developed with a view to interdisciplinary collaboration and involve different scientific and disciplinary areas to evaluate the effectiveness of AI applications in education, in addition to fostering the adoption of good practices.

University tools available to teachers and/or students

The AI tools provided by ASIT and the Digital Learning and Multimedia Office are available at elearning.unipd.it/dlm e asit.unipd.it.

Conclusions

As outlined in the General Principles (Section 2), the use of AI must always be responsible, transparent and guided by critical thinking. The University encourages the mindful use of AI tools, while valuing the intellectual autonomy of university teachers and students.

In conclusion:

Teaching: the use of AI to personalise learning paths or automate assessment can make teaching more effective, but it must be complemented by an approach that encourages critical thinking among students.

University teachers must monitor and guide students in the responsible use of technological tools.

Dissertation and thesis writing: AI tools such as grammar checkers can be useful, but they should not replace students' autonomy in writing. It is essential for students to develop their research and writing skills and not rely entirely on automated tools for their dissertations and theses.

AI can contribute significantly to teaching and academic writing by providing tools for data analysis, automation of repetitive tasks, content creation, and making teaching more effective. **However, it is essential that students and university teachers do not become reliant on these technologies, but use them to enhance their critical and creative thinking.**

Acknowledgements

Appendix

Reference legislation

1. AI Act (EU Regulation 2024/1689)

European Union regulation establishing standard rules on the use of artificial intelligence, prohibiting high-risk applications and imposing transparency and accountability requirements.

2. Italian Strategy for Artificial Intelligence 2024–2026

Document setting out national guidelines for the safe, responsible and transparent adoption of AI in public institutions and the education sector.

3. GDPR (EU Regulation 2016/679)

General regulation on the protection of personal data, which requires the protection of privacy and limits the use of sensitive data in technological systems, including those based on AI.

4. Italian laws on Privacy

Set of national laws that regulate the protection of personal data in accordance with the GDPR, with particular attention to data security in education.

5. Code of Ethics of the University of Padova

Internal document that establishes the principles of academic integrity, transparency, respect for intellectual property and individual responsibility for students and university teachers.