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## **Foreword**

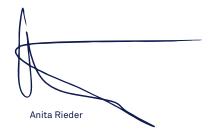
Student theses are not only a calling card for the next stage of the author's career, but they are also a clear indicator of the work and support provided by the parent university. With this in mind, it is the intention of MedUni Vienna to provide its students with sound knowledge and awareness in the field of scientific work. MedUni Vienna sees itself as responsible for producing young scientists who work with integrity and apply critical thinking, so that it can uphold and maintain public trust.

This begins with the teaching of the course content included in the course of study, continues with the supervisory and support obligations of the supervisors of theses and – last but not least – ends in the personal responsibility of the students to adhere to the prescribed regulations when authoring scientific papers.

These guidelines therefore serve to raise awareness and act as an instruction manual for students and supervisors at MedUni Vienna on the subject of "preventing plagiarism" and are intended to help avoid scientific malpractice. It goes without saying that these guidelines are binding for all work produced at the Medical University of Vienna. These principles not only apply to final theses, but to all (written) work done, e.g. as part of course work. This guideline therefore constitutes a further requirement of MedUni Vienna to complement compliance with the international "Good Scientific Practice" guidelines and so lies upstream of the actual work carried out in this area by MedUni Vienna's plagiarism audit office.

This guideline is intended to outline all the aspects necessary to provide a clear and transparent summary of MedUni Vienna's policy, as well as the associated time limits, so that, as well as being an instruction manual, it also contains all relevant information in this area.

Markus Müller



## 1 Introduction

# We would like to thank you for agreeing to supervise a degree/doctoral thesis at MedUni Vienna.

These guidelines are intended to outline the framework for supervising a thesis, and to support you when supervising students' work.

For doctoral theses at MedUni Vienna, the following also apply (unless otherwise explicitly stated in these guidelines):

- » Information on doctoral programmes offered by the MedUni Vienna
- » MedUni Vienna: Our doctorate programmes
- » Statutes of the Medical University of Vienna
- Austrian Universitätsgesetz (Universities Act) 2002, as amended (www.ris.bka.gv.at/Dokument.wxe?Abfrage= Erv&Dokumentnummer=ERV\_2002\_1\_120)
- » Act on Quality Assurance in Higher Education

For master's theses written as part of a postgraduate course, the current guidelines for master theses for continuing education programmes also apply (unless otherwise explicitly stated in these guidelines).

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### 2 General

#### 2.1 Role of the supervisor

Your duties include actively promoting the development of the next generation of researchers. Supervision of degree theses is demanding in terms of time and content. At the same time, the quality of theses is a mark of the high quality of education at MedUni Vienna.

A major part of your role is to ensure that work is carried out and the thesis is written to a high academic standard, following the Good Scientific Practice guidelines<sup>1</sup> and other standards adopted by MedUni Vienna. Consequently, MedUni Vienna expects supervisors to adhere to the following principles:

- Mentoring students with the aim of ensuring that, as far as possible, the potential advantages of plagiarism do not affect their work.
- Supporting students in choosing and defining a thesis topic and being available as the contact person for discussion of all related issues.
- >> Prompting students to register their thesis properly.<sup>2</sup>
- Supervising progress on the thesis by means of regular status meetings, to help assure the quality of the work through expert professional support.

#### Further requirements:

- The degree/doctoral thesis must be supervised by a member of MedUni Vienna or a recognised postsecondary education institution in Austria or abroad; detailed information on the individuals who may act as supervisors is provided in the MedUni Vienna statutes.
- The requirements for supervisors are specified in sections 17a and 17b of Part II of the Statutes of the Medical University of Vienna. Please note the differences in respect of undergraduate, master's and doctoral theses in this regard.

- The supervisor must provide the student with specialist support and advice, and be available for discussions, while the student is writing their thesis, to the extent outlined in the project study/thesis proposal.
- The feasibility of writing an undergraduate thesis, master's thesis or doctoral thesis in a particular organisational unit must be confirmed by the head of the unit in question before work on the thesis begins. In this regard, the requirements of sections 81(3) (2) and 83(2) Universities Act regarding the use of financial resources and equipment must be taken into account.
- » If the student participates in a project in which the supervisor is involved, the supervisor must contact the MedUni Vienna Legal Department (rechtsabteilung@meduniwien.ac.at) regarding the agreement on participation in projects by students.
- If the student is participating in a project, the supervisor must contact the Legal Affairs and Compliance Department at MedUni Vienna (rechtsabteilung@meduniwien.ac.at) regarding the Agreement on Participation in Projects by Students.<sup>3</sup>
- Windergraduate and master's theses: pursuant to section 81(2) Universities Act, the scope must be defined in such a way that completion of the thesis is possible and reasonable within six months.
- **Doctoral theses:** the supervisor may not be assigned as the reviewer (see section 17b[12] of Part II of the Statutes of the Medical University of Vienna).

<sup>&</sup>lt;sup>1</sup> Good scientific practice means observing legal regulations, ethical standards and the current state of knowledge in the respective field, in the context of the role and aims of the institution concerned. For more information see www.meduniwien.ac.at/en/gsp.

<sup>&</sup>lt;sup>2</sup> undergraduate thesis: The student must notify the curriculum director of the topic of their undergraduate thesis and the name of the supervisor in writing by submitting a detailed description of the planned project before starting work on the thesis (see section 17a[7] of Part II of the Statutes).

Doctoral thesis: The student must notify the curriculum director of the topic of their doctoral thesis and the name of the supervisor in writing, including a work plan, before starting work (section 17b[7] of Part II of the Statutes).

<sup>&</sup>lt;sup>3</sup> Does not apply for doctoral theses.

#### 2.2 Topics

Curriculum directors are responsible for ensuring that topic suggestions and opportunities are communicated appropriately.

- The topic of the thesis must be related to one of the disciplines represented at the Medical University of Vienna or included on the curriculum (see section 59[1][5] Universities Act and sections 17a[4] and 17b[4] of Part II of the Statutes of the Medical University of Vienna).
- Pursuant to section 81(2) Universities Act, the scope of undergraduate and master's theses must be defined in such a way that completion of the thesis is possible and reasonable within six months.
- Students are permitted to work jointly on a topic, but it must be possible to separately assess the performance of each student (sections 81[3] and 83[2] Universities Act).
- The student must notify the curriculum director of the topic of their undergraduate/master's thesis and the name of the supervisor in writing by submitting a detailed description of the planned project before starting work on the thesis (see section 17a[7] of Part II of the Statutes of the Medical University of Vienna).
- **Doctoral theses:** The student must notify the curriculum director of the topic of their doctoral thesis and the name of the supervisor in writing, including a work plan, before starting work (section 17b[7] of Part II of the Statutes of the Medical University of Vienna).
- Once completed, the thesis must be submitted to the curriculum director for assessment (sections 17a[11] and 17b[12] of Part II of the Statutes of the Medical University of Vienna).

#### 2.3 Deadlines

- Following submission, the thesis must be assessed within the period specified by law.
- » For undergraduate and master's theses, this means the supervisor must review and assess the thesis within six weeks of the date of submission. If the thesis is not reviewed and assessed within this period, at the student's request the curriculum director must assign another member of the university to carry out the review and assessment in accordance with section 17a[2] or [3] of Part II of the Statutes of the Medical University of Vienna (see section 17a[11] of Part II of the Statutes).
- » If, in the course of the plagiarism review, the curriculum director identifies deficiencies in a submitted thesis that significantly impede assessment, the student must be given the opportunity to rectify the deficiencies and resubmit the revised thesis. The supervisor must review and assess the resubmitted undergraduate/master's thesis within six weeks of resubmission (see section 17a[11a] of Part II of the Statutes of the Medical University of Vienna).

#### » Doctoral theses:

Once completed in accordance with the work plan, the doctoral thesis is submitted to the Curriculum Director. The Curriculum Director must immediately appoint two reviewers to review and assess the doctoral thesis, one of whom must be a member of the Medical University of Vienna and the other an external reviewer, who must review and assess the doctoral thesis within four months of submission. The supervisor may not be assigned as the reviewer. If the doctoral thesis is not reviewed and assessed within this period, at the student's request the curriculum director must assign one or two other reviewers to carry out the review and assessment (section 17b[12] of Part II of the MedUni Vienna Statutes).



# 2.4 Degree/doctoral theses completed as part of research projects

If a thesis will be written as part of a research project, an agreement between the student and MedUni Vienna must be concluded in advance (except in the case of doctoral candidates who have an employment contract with the university). Supervisors can obtain the contract template (Agreement on Participation in Projects by Students) on request from the Legal Affairs and Compliance Department. In case of doubt, please contact the MedUni Vienna Legal Affairs and Compliance Department.

# 2.5 Copyright, obligation to publish and blocking request

Section 86(1) Universities Act states that a graduate must publish an academic thesis that has received a positive assessment before they can be awarded their degree. At MedUni Vienna, students fulfil this obligation by uploading the final electronic version of their thesis to the MedUni Vienna ePub University Library repository. Publication of the thesis is required before award of their degree. When submitting the thesis in this way, the author is entitled to request that access to the uploaded paper is withheld for a maximum of five years from the date of submission. Under section 86(4) Universities Act. the request must be approved if the student demonstrates that publication would jeopardise material legal or economic interests. This means that not every possible threat to interests is sufficient to allow the request; the threat must jeopardise material interests.

The provisions of the Austrian Urheberrechtsgesetz (Copyright Act), Federal Law Gazette No. 111/1936, as amended must be considered in the course of working on the topic and supervising the student.

**Note:** Please remind your supervisees that full-text publication in a public access repository amounts to publication under copyright law, which would contravene the requirements of most publishing houses (initial publication).

# Note: publications related to undergraduate and master's theses

The following points should be noted in case of (joint) publication of data BEFORE approval of an undergraduate or master's thesis:

- The publication must include a statement to the effect that data (or parts of the data) were collected in the course of an undergraduate or master's degree thesis.
- The degree candidate must be listed as a co-author of the publication.
- When writing the thesis, students must bear in mind that the publisher may now hold copyright<sup>4</sup>, and that the use of illustrations or tables from the publication might only be permitted with the agreement of the publisher.
- Ensure that references include correct page numbers, even if copyright is held by the author(s) themselves, as this is a requirement of good scientific practice (caution: risk of self-plagiarism!).
- In the text itself it is unlikely that problems will arise, since an undergraduate thesis is formulated differently to a research paper. Nevertheless, care must be taken to avoid plagiarism; where necessary, use different formulations or cite the corresponding parts of the publication.

# The following points should be noted in case of (joint) publication of data AFTER approval of an undergraduate thesis:

- If the undergraduate thesis has already been approved, the student is the copyright holder and, to an extent, also the publisher.
- The publication must contain a statement to the effect that data were collected as part of an undergraduate thesis.
- Include the degree candidate as a co-author: identical passages of text must be avoided as far as possible, which should not be a major problem in terms of format requirements because other findings are usually also included in the publication. Since in this case the copyright was originally held by the student, in case of publication the student transfers copyright to the publisher.

<sup>&</sup>lt;sup>4</sup> The term "copyright" does not exist in Austrian law. However, in the interests of readability, the term is used in the German-language version of this document as a synonym for copyright or exploitation rights.

## 3 Quality assurance before writing begins

Please explain to your supervisees that they need to decide on one literature and knowledge management system and one citation system (Harvard, Vancouver) before starting work on their thesis.

Please also inform supervisees that they can receive support for database research, e-journals and library use at any time in the University Library (contact schulung-bibliothek@meduniwien.ac.at).

When writing a degree/doctoral thesis, the guidance for text composition for academic degree theses must be observed, as set out in the Guidelines for Writing Theses at MedUni Vienna (see also "Overview of PDF/A-1a and 1b specifications").

When conducting literature research, academic literature must always be given precedence over non-academic literature (including online).

A sample thesis can be found here: ub.meduniwien.ac.at/en/services/plagiarism-review/guidelines



## 4 Quality assurance during the writing process

Please make your supervisees aware of the golden rules for avoiding plagiarism for students:

#### Golden rules for avoiding plagiarism for students:

- Make sure you understand the significance of plagiarism, self-plagiarism and deception of reviewers. Present new text and findings.
- **Do not copy anything, anywhere** in your work.
- If you have transferred exclusive copyright to a publisher, ask the publisher for permission if you want to use works that have already been published, including your own.
- >> You are permitted to use plagiarism-checking software to identify possible instances of plagiarism in your thesis before submitting the final version.

The thesis needs to be composed in the student's own words as far as possible (no "copying and pasting" from published works or other degree/doctoral theses); if necessary, related research projects must be stated and existing publications listed. This is best achieved by observing the following points (see also the checklist in the appendix):

- Use quotation marks ("...") to indicate direct quotations, with a reference to the page number.
- The reference must be inserted directly at the relevant point in the text (and not just at the end of the paragraph).
- References must always follow the chosen citation style, correctly and in full, in the text as well as in the bibliography.
- For passages that are similar to the original text, a reference with page number should also be given.
- Thinking, content and ideas adopted from other sources must be acknowledged as such.
- References for illustrations, graphics, tables and formulas taken from literature must include the exact page number or, if applicable, the illustration/graphic/ table/formula number in the original publication.

Changes made to illustrations, tables and graphics
must be noted/indicated (e.g. adapted from, amended
from, based on). A licence to edit the illustration must
also be obtained from the publisher/rights holder.
 (Please make your supervisees aware of the Teaching
guidelines regarding data protection and copyright).



intranet.meduniwien.ac.at/lehre/rechtliches-lehre/#c4416

- If formulations such as "A number of studies have shown that ..." are used, the studies (publications) must also be referenced.
- References must also be provided for specific studies referred to in the text.
- Secondary citations must be indicated as such.
- If specific figures are stated in the text, they must be clearly supported by a reference.
- Academic literature (including academic literature published online) must always be given precedence over other publications.
- Formulas must be numbered on the right-hand edge of the page, in accordance with chapter number (to simplify corrections), e.g. (1.1), (1.2)

- Illustrations and tables must also be numbered with the chapter number (this makes changes easier), e.g. Figure 1.1: [description], Figure 1.2: [description]
- All images and tables must be accompanied by descriptions. Lists of illustrations, tables and formulas must be provided in the thesis, including a clear reference to their position in the text (page number, etc.) The numbering and descriptions of illustrations, tables and formulas must be identical in the list and in the text.
- Embedded illustrations, tables and formulas must be introduced and explained in the text and not simply inserted without explanation.
- Indicate Al usage, save prompts and Al output, document using a table of tools used and describe the degree of revision.

#### » Referencing pictures and photographs

- The agreement of the publisher must be obtained (evidenced by e.g. the invoice number, licence number, date of approval) for the use of illustrations that are not produced by the author, in addition to correct citation of the source (in the list of illustrations and/or where the illustration appears in the text).
- Specific approval must also be obtained from the rights holder for diagrams and pictures that are used in an edited form rather than the form they were originally published in. Such modification must be indicated in the thesis (e.g. using a note such as "modified from XXX" or "adapted from XXX"). Infringements of copyright can result in criminal or civil charges being brought.
- CC<sup>5</sup> licence: In the case of illustrations or images that are published under a free licence or Creative Commons (CC) licence, the terms of the licence applying to the work must be observed.

**Note:** Please be aware that pictures found on the internet are, in most cases, subject to copyright and cannot simply be copied and used. For such images either a licence/right of use must be obtained from the copyright holder, or the licence terms applying to the work must be observed.

# 5 Quality assurance after writing | Plagiarism review at MedUni Vienna

Academic papers written and supervised at MedUni Vienna undergo a plagiarism review following submission to the university (i.e. upload to MedCampus) and are assessed by the supervisor<sup>6</sup> before they are made publicly accessible via the MedUni Vienna ePub University Library repository (repositorium.meduniwien.ac.at).<sup>7</sup>

The following steps need to be carried out by the supervisee and supervisor:

- » Make blocking request (if required)
- » Upload thesis in MedCampus
- Check status of plagiarism review: if necessary, incorporate the information from the plagiarism review report with the support of the supervisor
- » Assessment by supervisor/reviewer<sup>6</sup>

Please note the deadlines for the assessment and plagiarism review process! (See also Section 2.3 Deadlines)

<sup>&</sup>lt;sup>6</sup> Does not apply for doctoral theses.

<sup>7</sup> If a request to withhold access (blocking request) has been granted, the work will only become publicly accessible after the block has expired.

# 6 How can supervisors identify and avoid plagiarism?

According to section 2a(3) Act on Quality Assurance in Higher Education, academic or artistic misconduct is committed if someone:

- obstructs or sabotages the research activities or artistic work of others.
- uses unauthorised tools; this includes the improper use of artificial intelligence applications.
- receives unauthorised assistance from another person or work is contracted from a third party in writing an academic thesis (ghostwriting), taking an examination or preparing an artistic work.
- adopts texts, ideas, or artistic works wholly or partially and presents them as their own. This particularly applies to the use of text passages, theories, hypotheses, findings, or data through directly, or in paraphrased or translated form, without appropriately crediting and citing the source and the author (plagiarism).
- fabricates or falsifies data or results.
   (ris.bka.gv.at/eli/bgbl/i/2011/74/P2a/NOR40261627)



# The following points should be followed in order to identify and avoid instances of plagiarism:

- Make sure the supervisee provides you with regular updates on their work on the thesis
- » Read passages of the text and look up sources (check for translation plagiarism!)
- Support the supervisee during the writing process
- Check sources, especially for illustrations and tables
- » Remind the supervisee to deal with sources with care
- Provide the supervisee with information on correct referencing in good time
- >> Encourage and illustrate diligent working methods

#### 6.1 Consequences of plagiarism

It is important to remember that plagiarism is not a trivial offence, and in addition to consequences that have become well-known due to reports in the media – such as revocation of an academic degree and nullification of assessments that have already taken place – there may also be legal consequences under criminal and civil law. Plagiarism is intellectual property theft and can be punished accordingly. As a result, the student may be ordered to pay damages to the original author, and certain deliberate acts of copyright infringement may be punished by up to six months in prison or a fine of up to 360 day-fines.

In case of plagiarism, sanctions under university law may also be imposed in accordance with the university's statutes.

If deficiencies that significantly impede assessment are identified in the course of the plagiarism review and/ or during the assessment of the undergraduate, master's or doctoral thesis, the student must be given the opportunity to rectify these deficiencies and resubmit the revised thesis (see section 17a[11a] and [11b], and section 17b[13] of Part II of the Statutes of the Medical University of Vienna).

If it is determined in the course of assessment that an academic thesis contravenes the rules of good scientific practice, the thesis must be graded as "not satisfactory" (section 15a[2] of Part II of the statutes).

If it is determined after assessment and before graduation that an academic thesis contravenes the rules of good scientific practice, then in accordance with section 73 Universities Act the assessment must be nullified, by notice of the curriculum director (see section 15a[3] of Part II of the statutes).

If it becomes clear after graduation that the academic degree or title has been obtained under false pretences, in particular by means of scientific or artistic misconduct in the meaning of section 2a(3)(2-5) Act on Quality Assurance in Higher Education, the academic degree or title is to be revoked pursuant to section 89 Universities Act.

#### 6.2 Artificial intelligence

Artificial intelligence (AI) tools are now available for many different tasks: for clinical and research activities, as well as for literature research and the creation of texts and illustrations, translations, program codes, etc. However, these tools do not just deliver advantages – they also entail risks that should not be underestimated and, in some cases, have consequences that are, as yet, unforeseeable. When writing a thesis, the question that is most likely to arise regards the use of text generators. At present, the best-known of these is ChatGPT, which became well-known worldwide when it was released at the end of 2022. Many such programs are now available, and the risks and potential benefits for all of these text generators are by and large the same.

#### 6.2.1 How do Al tools work?

Al tools use statistical patterns to generate answers to prompts entered by the user. The tool determines the most likely sequence of words and displays it without understanding the content (stochastic parrot). (Bender et al., 2021)

In order to generate coherent texts, AI tools are trained using existing texts. These data sets consist of texts that are freely available online. For example, ChatGPT was trained using various sources, including Wikipedia.

#### 6.2.2 Limitations

Although they are referred to as artificial intelligence, text generators are not able to actually understand the content they produce. This means that although they can produce texts that sound convincing, the texts can also contain incorrect and made-up information (known as hallucinations). It is also possible that the AI was trained using low-quality or unscientific material, and will generate biased and questionable output as a result. In addition, the data used for training and the answers the AI generates may be out of date. Put simply, text generators are precisely that – and not search engines.

As a result, responsibility for the use of AI-generated content always rests with the user, and this calls for appropriate content-related, linguistic and analytical skills. This underlines the fact that AI tools are not a substitute for personal abilities; at best, they are a means of support.

In any event, the issue of data protection must be considered before using an AI tool. In terms of the General Data Protection Regulation (GDPR), the question of where entered data are stored and where servers are located needs to be considered, and you must also bear in mind that data entered into generative AI tools may also be processed, both by the tool itself and by human AI trainers or programmers.

As a result, entering patient data must be avoided. Also, think very carefully before disclosing research data. In addition, it is often necessary to register and provide personal data in order to use an Al tool.

In light of these factors, it pays to take a critical view of the use of AI text generators when writing theses. When it comes to supervision, this also gives rise to the question of whether a submitted thesis constitutes the author's own work if they did not produce parts of it themselves. As a consequence, supervisees should only use AI in consultation with their supervisor. Please note that as a supervisor, you are the principle contact person for students regarding the use of AI tools, and that as a result you bear a certain responsibility in this regard.

Even if such tools are also used for translation or proof-reading, this information must be openly and clearly disclosed to the reader (see e.g. APA Style Blog, referenced below).

Any use of AI tools, whether for text generation or for text enhancement such as machine translations and text improvements based on AI or other algorithms, must



be specified in the table of tools used and an indication given of the degree of revision. The software used must be included in the bibliography. Additionally, text passages or word-for-word translations generated using such tools should be cited directly in the corresponding section.

The table of tools used provides additional transparency in the disclosure of aids used. It is not a substitute for citation standards, nor does it replace the description of methods and tools used, or the bibliography.

#### Please note the following:

- Data protection requirements must always be taken into account before any information is entered into the software (no entering of personal data). What happens to the data, including whether it can be traced back to individuals, and whether such data is further processed or utilised, must be carefully reviewed.
- The AI tool must be listed as software in the bibliography and cited in accordance with the convention for the chosen citation style. Results must be carefully verified for correctness, plausibility and possible bias before use. As the author of the thesis, the student is responsible for the correctness of the statements presented in it.
- We of AI must be documented as precisely as possible when writing the thesis, in the table of tools used or the methodology section, including a description of degree to which it has been revised. The specific location in the text must be referenced where generated content, illustrations and word-for-word translations are used. AI outputs and prompts must be documented and can be linked in the table of tools used, or presented in the appendix where appropriate.

#### For further information see:

APA Style Blog (2023) How to cite ChatGPT. Available at apastyle.apa.org/blog/how-to-cite-chatgpt (last accessed on 17 January 2025).

Bender, E.M., et al. (2021) On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? (from FAccT,21: 2021 ACM Conference on Fairness, Accountability, and Transparency, Virtual Event Canada, 3-10 March 2021), Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency, pp. 610-623. Available at doi.org/10.1145/3442188.3445922

Foltynek, T., et al. (2023) ENAI Recommendations on the ethical use of Artificial Intelligence in Education, International Journal for Educational Integrity, 19, article number 12. Available at doi.org/10.1007/s40979-023-00133-4

IEEE Computational Intelligence Society (2023) Information for Authors IEEE Transactions on Artificial Intelligence Author Instructions. Available at cis.ieee.org/publications/ieee-transactions-on-artificial-intelligence/information-for-authors-tai (last accessed on 14 January 2025).

Niederkofler, H./University of Vienna blog (2023) OK with AI? Unlocking the potential of AI tools and maintaining integrity Available at blog.univie.ac.at/en/life-at-uni/okwith-ai (last accessed on 17 January 2025).

Thirunavukarasu, A.J., et al. (2023) Large language models in medicine, Nature Medicine, 29, pp. 1930–1940. Available at www.nature.com/articles/s41591-023-02448-8 (last accessed on 14 January 2025).

University of Vienna (pub.) (2024). Guidelines der Universität Wien zum Umgang mit Künstlicher Intelligenz (KI) in der Lehre ('University of Vienna Guidelines on Working with Artificial Intelligence [AI] in Teaching'; German only). Second edition (Vienna). Available online at phaidra.univie.ac.at/detail/o:2092606 (last accessed on 2 December 2024)

## 7 Forms of plagiarism

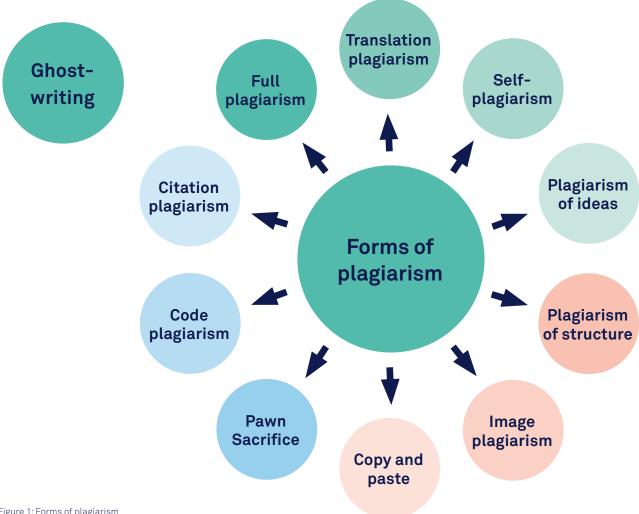


Figure 1: Forms of plagiarism

#### 7.1 Full plagiarism

Full plagiarism, complete plagiarism or literal plagiarism is the copying of another's work or sections of it without obtaining the consent of the actual author. Sometimes the actual source will be included in the bibliography (i.e. the short reference in the text or the referencing footnote have been "forgotten"), or alternatively the source may not be listed at all.

#### 7.2 Translation plagiarism

Translation plagiarism is the translation of works or parts of works produced in a foreign language and incorporation into one's own work, without acknowledging the source and providing a reference.

#### 7.3 Self-plagiarism | auto-plagiarism | recycling | augmented publication

Self-plagiarism is the use of existing and/or published texts without acknowledgement or correct referencing. This undisclosed duplication of work happens when the author neglects to provide references to their own previous publications.

Alternatively, the author may add (slightly modified) data and/or information to content from papers that have already been presented or published, change the title or aim of a study and/or recalculate results.

In this case, references to the author's own work are also lacking.

#### 7.4 Plagiarism of ideas

This form of plagiarism occurs when ideas, opinions or insights are incorporated without appropriately acknowledging their source. The essence or content of the idea is retained, but reformulated in the author's own words and consequently presented as their own work.

#### 7.5 Plagiarism of structure

Plagiarism of structure is a particular form of plagiarism of ideas, where the structure of another author's text is fully or partly appropriated (e.g. table of contents, chapter structure, sequence of presentation).

# 7.6 Image or illustration plagiarism (incorrect citation of pictures, photos, etc.)

Image or illustration plagiarism occurs when illustrations from a plagiarised text are appropriated, or illustrations produced by another person are explicitly presented as the author's own work. This includes full or partial plagiarism of photos, graphics, videos, pictures, tables, diagrams, etc., when the true source is not mentioned or not correctly referenced, or the required permission has not been obtained.

#### 7.7 Copy and paste | shake and paste | find and replace

These terms refer to instances of plagiarism where texts are not independently produced by the author, but are assembled from sources that are sometimes acknowledged and sometimes unacknowledged. "Find and replace" plagiarism is a form of invalid paraphrasing, where individual words are replaced by synonyms.

#### 7.8 Pawn Sacrifice

This form of plagiarism comprises word-for-word incorporation of passages of text under the guise of paraphrasing. The footnote refers only to an insignificant part of the original text, large sections are appropriated from the same source without referencing, and quotation marks to denote quotation are missing.

#### 7.9 Code plagiarism

Code plagiarism is use of programming code, algorithms, classes or functions without permission or reference (see Maurer, H. A., Kappe, F., Zaka, B. [2006]. Plagiarism – A Survey. Journal of Universal Computer Science, 12[8]: 1050-1084.)

#### 7.10 Citation plagiarism

Citation plagiarism occurs when references, including bibliographic information, are taken from other sources without acknowledgement.

#### 7.11 Ghostwriting

Ghostwriting involves passing off another author's work as one's own with their consent. The real author of the text transfers rights of use to the client and waives their right to be named as author. If the ghostwriter adheres to good scientific practice, such ghostwriting arrangements need not automatically result in plagiarism.

At a university, ghostwriting is against the law when the work concerned is assessed work that the student must produce personally. In this context, use of a ghostwriter constitutes academic misconduct, and just like plagiarism is subject to sanctions under university law.

\* See also "scientific misconduct" in the current version of the Guidelines for Good Scientific Practice www.meduniwien.ac.at/en/gsp



## 8 Data protection

Please note that once completed, degree/doctoral theses will be published online in the MedUni Vienna University Library repository (or after a maximum of five years if publication is blocked pursuant to section 86[4] Universities Act). For this reason, personal data such as addresses, signatures, telephone numbers and matriculation numbers should not be included in the CV. Students must also avoid publishing information that could endanger the well-being of other people (e.g. use of interviews or other personal data). Please also note that if your supervisee would like to address questions focused on individuals or patients, or topics that form part of MedUni Vienna's research, the Ethics Committee, as well as - if necessary - the university's Data Protection Committee and/or the Clearing Board for Teaching must be consulted and the necessary approval obtained.

Personal data, i.e. all information that can be traced back to a specific individual, are subject to special legal protection8. This means you are obliged to ensure that your supervisee has pseudonymised personal data – in other words, removed information that can be used to determine an individual's identity, such as names and dates of birth - where possible during their research. Any data in a thesis should be anonymised as far as possible before publication, which also includes removing identification numbers (e.g. social insurance numbers, patient IDs, etc.). If pseudonymisation of any raw data used in writing the thesis is not possible, steps must be taken to ensure that third parties do not gain unauthorised access to the data. This involves taking steps to ensure adequate encryption or locking of laptops when it comes to hardware<sup>9</sup> and that providers of software solutions do not use information for their own purposes and provide a secure data environment.

In particular, see the General Data Protection Regulation (GDPR, Regulation [EU] 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC)

<sup>&</sup>lt;sup>9</sup> See guidelines on IT services and end devices at MedUni Vienna, Version 2022-1.1



## 9 Other relevant guidelines and regulations

When writing and when supervising a thesis at MedUni Vienna, in addition to the generally applicable legal regulations, care should be taken that the following guidelines and regulations are observed, where relevant:

- The Austrian Arzneimittelgesetz (Pharmaceuticals Act), Medizinproduktgesetz (Medical Products Act), Gentechnikgesetz (Gene Technology Act), Tierversuchsgesetz (Animal Experimentation Act) and Tierversuchs-Verordnung (Animal Experiments Order), as amended
- Copyright Act, Federal Law Gazette No. 111/1936, as amended
- The Declaration of Helsinki



www.wma.net/policies-post/ wma-declaration-of-helsinkiethical-principles-for-medicalresearch-involving-humansubjects » Medical University of Vienna Guidelines on Good Scientific Practice – Ethics in Science and Research:



www.meduniwien.ac.at/en/gsp

» MedUni Vienna Ethics Committee regulations:

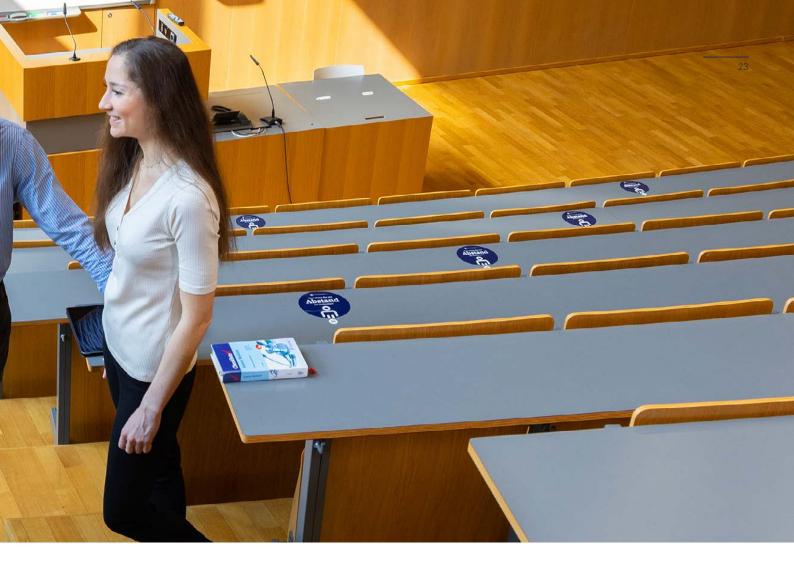


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MedUni Vienna Data Protection Committee regulations:



www.meduniwien.ac.at/web/en/ about-us/organisation/committees/ data-protection-committee/



» MedUni Vienna Data Clearing House regulations:



www.meduniwien.ac.at/web/en/ about-us/organisation/committees/ data-clearing-house/

Where applicable: Regulations of the MedUni Vienna Data Clearing House for Teaching (German only):



www.meduniwien.ac.at/web/ueber-uns/organisation/organisationsein-heiten-mit-spezieller-servicefunktion/teaching-center/clearing-stellelehre-der-meduni-wien

Medical property; Mitteilungsblatt of the Medical University of Vienna, 2020/2021 academic year, Vol. 28, No. 31:



www.meduniwien.ac.at/web/ fileadmin/content/serviceeinrichtungen/rechtsabteilung/mitteilungsblaetter\_2021/28\_Mitteilungsblatt\_21052021\_IP\_Richtlinien.pdf » Recommendations for publishing



e.g.: www.icmje.org



e.g. Vancouver style www.ncbi.nlm.nih.gov/books/ NBK7262



e.g. Harvard style www.usq.edu.au/library/referencing/ harvard-agps-referencing-guide



» Cite Them Right



www.citethemrightonline.com

» Topic bank for the Medicine undergraduate programme:



ssm.meduniwien.ac.at/n202/block24/lvleiter.html

» Topic bank for the Medical Informatics master's programme:



cemsiis.meduniwien.ac.at/ master-medinf/studium/ themenboerse >> Website for MedUni Vienna students (German only):



www.meduniwien.ac.at/ studierende

» Information on gender-reflective language, and support tools for gender and diversity-related aspects in research (German only):



www.meduniwien.ac.at/diversity-resources

» MedUni Vienna Affiliation Policy:



www.meduniwien.ac.at/web/filead-min/content/serviceeinrichtungen/rechtsabteilung/compliance/220801\_Affiliation\_Policy\_2022\_EN.pdf

Teaching guidelines regarding data protection and copyright (German only):



www.meduniwien.ac.at/web/filead-min/content/serviceeinrichtungen/studienabteilung/studierende/humanmedizin/pdf/2021\_0111\_Leitlinie\_Lehre\_Datenschutz\_und\_Urheberrecht.pdf

>> MedUni Vienna Open Access Policy (German only):



ub.meduniwien.ac.at/services/ open-access-publizieren/

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ub.meduniwien.ac.at/services/ plagiatspruefung/leitfaeden » Guidelines for writing degree/doctoral theses at MedUni Vienna:



PhD and Doctoral Programmes (German only): intranet.meduniwien. ac.at/lehre/wie-ist-die-lehre-organisiert/doktoratsstudien



PhD Programme UN094: www.meduniwien.ac.at/web/studierende/mein-studium/phd-programme-un094/doctoral-thesis/doctoralthesis-compilation



Doctoral Programme of Applied Medical Science UN790: www. meduniwien.ac.at/web/studierende/ mein-studium/doctoral-programmeof-applied-medical-science/ doctoral-thesis/doctoral-thesiscompilation



Information to supervise a degree/doctoral thesis (German only): intranet.meduniwien.ac.at/lehre/rechtliches-lehre/#c4415

» Information on creating a PDF/A document for degree theses:



ub.meduniwien.ac.at/en/services/ plagiarism-review/guidelines

» MedUni Vienna Plagiarism Review Office:



ub.meduniwien.ac.at/en/services/ plagiarism-review

## 10 Degree/doctoral theses – quality checklist<sup>10</sup>

### Before submitting the project plan

- The student chooses a topic and registers the undergraduate/master's thesis with the Studies and Examinations Department
- Check whether approval must be obtained (e.g. from the Ethics Committee or Committee for Animal Experimentation) – the authorisation number must be stated in the thesis or, alternatively, a note confirming that approval has been obtained
- » Is the approval of the Data Protection Committee/Data Clearing House for Teaching required?
- Does an agreement need to be concluded between the student and MedUni Vienna (if the thesis will be written as part of a research project)? In case of doubt, please contact the MedUni Vienna Legal Department: rechtsabteilung@meduniwien.ac.at

### **Before writing**

- Careful choice of literature/knowledge management system
- Thorough literature research: academic literature (including online) must always be given precedence over other publications (for assistance with database research, e-journals and use of the library, please contact the Teaching Library at: schulung-bibliothek@meduniwien.ac.at)
- Make reference to the degree thesis in publications prior to approval, describe the contribution of the degree thesis and include references to it where applicable
- » Observe requirements regarding PDF/A format generation
- » Clarify use of AI tools with supervisee

### **During the writing process**

- Include complete and correct references in line with the chosen citation style, both in the text and in the bibliography
- The features of each citation style are based on specific manuals:

#### Vancouver style:



NLM (Citing Medicine)



AMA (Manual of Style, 11<sup>th</sup> Edition)



IEEE (Reference Guide)

#### Harvard style:



e.g. AGPS



APA (Publication Manual, 7<sup>th</sup> Edition)



Chicago (Manual of Style, 17<sup>th</sup> Edition)

#### Footnote system:



Chicago (Manual of Style, 17<sup>th</sup> Edition)

#### » General overview

Cite them right



Cite them right (print version)



Cite them right Online-Version Login: "Medizinische Universität Wien"

- » Cite and write relevant references must be noted (including exact page numbers where applicable) while writing
- Other authors' thinking, ideas and content must be indicated as such
- References must be inserted directly at the relevant point in the text (not just at the end of the paragraph)
- Specific figures must be clearly attributed to the relevant source
- Any studies referred to (exception: secondary quotations) must always be specifically referenced
- » Quotation marks ("...") must be used to indicate direct quotations, with a reference to the exact page number. Text must be presented true to the original and down to the letter, with any editorial changes marked with [].
- Text translated word for word must be indicated/ referenced in the same way as direct quotations (including a note on what was translated and by whom)
- Page numbers must be included at points in text that are very similar to the original source text

- » References to illustrations, tables, graphics and formulas must include the exact page number (where appropriate, provide the original number of the illustration, table, graphic or formula)
- » Illustrations, tables, graphics and formulas must be numbered properly
- » Changes made to illustrations, tables and graphics must be referenced (e.g. adapted from, modified from, etc.), and a licence for modification of the illustration, etc. obtained from the publisher/rights holder
- Source reference and the publisher's declaration of consent (evidenced by e.g. the invoice number, licence number and date of approval) must be obtained and included in the thesis, e.g. in the list of illustrations or next to the illustration in question
- Website for obtaining approval: www.copyright.com
- Where applicable, the research project within which the thesis is being written must be mentioned
- Publications where the thesis or part of the thesis has previously appeared (e.g. poster presentations, abstracts), must be listed, texts taken from such publications reformulated, and relevant parts of the publications referenced, including exact page numbers
- Methods section: the supervisee must use their own words as far as possible – texts must not be copied and pasted from published works or other degree/ doctoral theses
- » Al usage must be indicated, prompts and Al output must be saved and documented using a table of tools used and the degree of revision described

## Before uploading

- Make sure the pages of the thesis are properly numbered
- Use Roman numerals (i, ii, iii, iv, etc.) to number pages in the appendix
- >> Ensure you have followed formatting requirements
- Make sure that the structure of the thesis meets the requirements:
  - Table of contents
  - List of tables
  - List of formulas
  - Table of tools used
  - List of abbreviations and symbols
  - Bibliography
- » All chapters must be included in the table of contents
- » All illustrations, tables, graphics and formulas must be properly numbered and include a title in accordance with the relevant standards
- » Make sure references to adapted illustrations, tables and graphics are included (modified from, adapted from, etc.)
- » Ensure material is not copyright-protected
- » Check the quality of quoted sources
- Check the bibliography to make sure it contains all quoted sources
- Check bibliography entries to ensure that source information is uniform and correct
- Check URLs and links in the bibliography to ensure they function properly
- Check that all of the tools that have been used are listed (AI, etc.)
- Check data in MedCampus and update/correct if necessary:
  - Correct title (English/German)
  - Correct OU



## 11 Abbreviations

Al Artificial intelligence
CC Creative Commons

CC BY A CC BY licence grants unrestricted, irrevocable, free, worldwide and unlimited rights for any user to use a work in any way and for any purpose.

Authors and other parties must be named, and copyright and licence notices must be retained.

DOI Digital object identifier

GDPR General Data Protection Regulation

EK Ethics Committee

UG Universitätsgesetz 2002, Federal Law Gazette I

No. 120/2002

ORCID Open Researcher and Contributor ID

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This document does not contain any references. In addition to MedUni Vienna's regulations regarding degree/doctoral theses, this manual is based on:

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#### 12.1 List of illustrations

Figure 1: Forms of plagiarism

#### p. 18

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