

Regulation on Good Scientific Practice and Handling of Scientific Misconduct at the University of Applied Sciences Jena

as of 27th July 2023

Preamble

In accordance with § 3 Section (1) in conjunction with § 35 Section (1) No.1 of the Thuringian Higher Education Act (ThürHG) of May 10, 2018 (GVBl. p. 149), last amended by Article 1 of the Act of December 7, 2022 (GVBl. 483), the University of Applied Sciences Jena (Ernst-Abbe-Hochschule Jena) issues the following regulation on good scientific practice and handling of scientific misconduct. The Senate of the University of Applied Sciences Jena adopted the regulation on July 18, 2023. The President approved the regulation on 27th July 2023.

§ 1 Scope

(1) This regulation governs the content, scope, and procedures for proper scientific conduct at the University of Applied Sciences Jena (hereinafter referred to as the University), as well as the consequences of its violation.

(2) This regulation applies to all members and affiliates of the university. Concerning the regulations on good scientific practice pursuant to §§ 4 and 5, and scientific misconduct pursuant to § 6, this regulation applies to the academic and academic support staff of the University, i.e., professors, and academic, administrative, and technical staff. This regulation applies to former academic staff of the university insofar as these persons are the subject of proceedings pursuant to §§ 8 or 9. With regard to the reporting of scientific misconduct according to § 8 Section (3) Sentence 1, this regulation applies to everyone.

§ 2 Principles

(1) The integrity and honesty of scientific work are essential for the credibility of science as the driving force of our society. Ensuring this is the responsibility of universities within the framework of their overall responsibility for the scientific process and the responsibility of scientists in the execution of their profession. As part of this task, according to § 8 Section (6) ThürHG, the establishment and monitoring of good scientific practice are included.

(2) Ensuring good scientific practice is a task that concerns the entire university, especially:

- between those engaged in scientific activities and supervising or leading individuals in studies, examinations, transfer, or in scientific working groups,
- between scientifically active groups within the university or in relation to other scientific institutions, or
- in the relationship of scientifically active individuals to the bodies or committees as well as to the administrative activities of the university.

(3) In the context of personnel selection and development, gender equality and diversity are taken into account. The corresponding processes are transparent and avoid, as far as possible, unintentional influences ("Unconscious Bias"). Suitable support structures and concepts are established for the scientific offspring. Sincere advice for career paths and further career opportunities, as well as training and mentoring for scientific personnel, are provided and developed for non-scientific personnel.

(4) The impartation of the rules of good scientific practice begins at the earliest possible stage in academic teaching and scientific education. A continuous learning and development process is ensured, covering all career levels. Details are regulated in Annex 1.

§ 3 Roles and Responsibilities

(1) The governing bodies of the University of Applied Sciences Jena (Presidium, Senate, Deans, Departmental Councils) create the framework for scientific work within their areas of responsibility assigned by the State Higher Education Act and the constitution:

- They share responsibility for adhering to and promoting good scientific practice, as well as providing appropriate career support for all scientists.
- They establish, taking into account the specificities of the relevant disciplines, the conditions in research and teaching to ensure that scientists can adhere to the legal and ethical standards applicable to their respective fields. The framework includes written procedures and principles for personnel selection and development, as well as for promoting scientific offspring and ensuring equal opportunities.
- They are especially responsible for an appropriate institutional organizational structure. This structure recognizes the freedom of research and teaching of each individual scientific member of the university. At the same time, it ensures that the tasks of

leadership, supervision, quality assurance, and conflict resolution are clearly assigned and appropriately communicated to the respective members and associates.

(2) The leadership of a scientific working group bears responsibility for the entire unit. In particular, it ensures that:

- all members are aware of their roles, rights, and duties,
- the supervision, support, and further education of scientific offspring are guaranteed, and supervision duties are adequately fulfilled,
- support and further education for non-scientific personnel are ensured,
- the exploitation of dependency relationships is prevented through suitable organizational measures.

(3) The roles and responsibilities of personnel involved in a research project must be clear at all times during a research project and adjusted if necessary. The gender and/or diversity dimension for the research project should be reflected upon.

§ 4 Good Scientific Practice

Individuals according to § 1 Section (2) Sentences 1 or 2 are obligated to adhere to the rules of good scientific practice within the scope of their studies, professional tasks, or other legal or contractual obligations. This obligation includes, in particular, the tasks outlined in § 2, such as:

- conducting work in accordance with established standards,
- acting honestly regarding the contributions of others to one's own work, including the citation of original sources and the disclosure of the origin of used data,
- excluding so-called honorary authorship and limiting the citation of one's own works to the necessary minimum,
- consistently questioning all results,
- documenting the work results and the nature and extent of the research data generated in the research process,
- making early decisions regarding the reuse of one's own data and results, and
- advocating for these rules and taking responsibility for them.

§ 5 Areas of Action for Good Scientific Practice

The responsibility for good scientific practice permeates all areas of scientific work, including:

- Cross-phase quality assurance, methods, and standards,

- Legal and ethical framework conditions as well as usage rights,
- Scientific publications,
- Work on research projects,
- Handling of research data, such as raw data and research results, as well as the central materials underlying them and, if applicable, the research software used (see Annex 1, Point 1/IV and Point 4),
- Authorship for scientific publications,
- Confidentiality and neutrality in evaluations and consultations,
- Proper evaluation of scientific achievements, emphasizing quality over quantity and considering contributions to teaching, transfer, and academic self-administration while adhering to the General Equal Treatment Act (especially in relation to diversity and gender equality),
- Supervision of scientific offspring,
- Personnel management,
- Work with humans,
- Work with animals, and
- Gender and diversity.

Details regarding these areas of action are provided in Annex 1

§ 6 Scientific Misconduct

(1) Scientific misconduct occurs when there is a deliberate or grossly negligent violation of the rules of good scientific practice outlined in § 4, in light of the principles according to § 2. Specific details are provided in Annex 2.

(2) Violations of good scientific practice resulting from slight or moderate negligence remain subject to the assessment of study-related or work-related performance. Deviating from the first sentence, gross negligence in examination or study-related performances within the scope of the study is not the subject of procedures under this regulation but is considered in the evaluation of performance.

§ 7 Procedural Principles

(1) Procedures for reviewing scientific misconduct include the ombudsman procedure according to § 8 and the review procedure according to § 9.

(2) The procedures outlined in Section (1) aim to provide the utmost protection for the involved parties concerning documentation, storage, and disclosure of procedural documents,

particularly through confidentiality for both the person suspected of misconduct and the reporting person. The person suspected of misconduct must not face disadvantages due to the report, and there is a prohibition of discrimination concerning the reporting person. The ThürVwVfG applies to the procedures, particularly regarding official investigations and impartiality. The entire procedure and the substantive decision are made while preserving the presumption of innocence, meaning that scientific misconduct must be established beyond reasonable doubt. The individuals conducting the procedure are free from substantive instructions. Procedural documents are to be retained for 30 years.

(3) The reporting person is to be protected even in the case of unproven scientific misconduct, provided that the allegations are not demonstrably made with knowledge to the contrary of better judgment.

§ 8 Ombudspersons, Ombuds Procedure

(1) The Senate of the university appoints two experienced individuals from the academic staff of the university, who are not simultaneously members of a central governing body of the university, as ombudspersons for a duration of three years. Reappointment for an additional three years is possible once. The appointment of ombudspersons is publicly announced by the university. They receive the necessary substantive support and acceptance from the university leadership in carrying out their duties. To enhance the functionality of the ombuds system, a reduction in teaching obligations according to § 8 Thuringian Teaching Obligations Regulation or special performance benefits based on the university's performance benefits regulation may be granted to the ombudspersons.

(2) The primary task of the ombudspersons is to inform about the rules of good scientific practice at the university and to mediate in conflict situations. Additionally, they can conduct an ombuds procedure upon request. For examination or study-related performances within the study program, the persons responsible according to the study or examination regulations, especially examiners, the examination committee, the dean of studies, or the study commission, are competent. In fulfilling their duties, the ombudspersons are obligated to objectivity and neutrality. They mutually represent each other and coordinate their activities at reasonable intervals.

(3) Any individual is entitled, and members and associates of the university are obliged, to contact the ombudspersons if they have knowledge of a situation that does not rule out scientific misconduct. Individuals in the first sentence have the right to choose whether to contact the ombudspersons under Section (1) Sentence 1 or the supra-regional body "Ombudsperson for Science." The appeal to the ombudspersons must not contain consciously

false information and must be made in good faith and with the best knowledge. The ombudsperson examines the situation and determines whether scientific misconduct appears to be predominantly probable. The affected person also has the opportunity to comment. If interpersonal conflict is considered the main cause of the procedure, the ombudsperson may suspend or terminate the procedure and recommend conciliation or mediation. If conciliation or mediation is successful, the ombuds procedure may be terminated.

(4) A suspicion report in which the reporting person does not disclose their identity (anonymous report) is verified if the reporting person presents credible and sufficiently concrete facts that allow an examination with reasonable effort.

(5) If the ombudsperson considers scientific misconduct to be predominantly probable, they initiate the review procedure according to § 9. Otherwise, they inform the reporting person of the result of their investigation, outlining the supporting factual and legal reasons. The ombudsperson informs the person affected by the suspicion of scientific misconduct in the same manner as those individuals under Section (3) Sentence 1 who have contacted the ombudsperson. The ombuds procedure should be completed within one month.

(6) If the ombudsperson does not initiate a review procedure, the reporting person may request the initiation of a review procedure according to § 9. The commission according to § 9 Section (1) Sentence 2 decides on the request. This should take place no later than two weeks after its establishment by the president.

§ 9 Review Procedure

(1) Requests according to § 8 Section (5) Sentence 1 and § 8 Section (6) Sentence 1 are to be submitted in writing to the president. The president establishes a review commission consisting of two experienced individuals from the academic staff of the university in the relevant field and a member of the university qualified for judicial office. Stand-in representatives must be designated for all commission members in case of impediment. The ombudsperson from the preceding ombuds procedure is involved in an advisory capacity.

(2) The review commission examines the case, taking into account all admissible sources of information, and shapes the further procedure at its reasonable discretion, depending on the seriousness of the allegation and the complexity of the case. The commission, in independent evaluation of evidence, determines whether scientific misconduct exists. The individuals affected by the suspicion must be heard in every case in a non-public oral hearing. They may bring a person of their trust as an advocate to their hearing; this also applies to other individuals to be heard. The reporting person should have the opportunity to provide additional statements.

(3) The procedural deadlines are to be set in a way that ensures an expeditious procedure. The review procedure should be completed, unless special circumstances dictate otherwise, within three months.

(4) If the review commission finds scientific misconduct not proven, the procedure is terminated. If the commission determines scientific misconduct, it submits to the president the result of its investigation, outlining the supporting factual and legal reasons, and a decision proposal, taking into account § 11.

(5) The president, applying § 11, decides on the decision proposal of the review commission. If the president intends to deviate from the decision proposal according to Section (4) Sentence 2, the president must consult the review commission beforehand. The president issues notices to the individuals affected by the suspicion, containing a justification and, in the case of a burdening decision, legal remedies information.

(6) The essential factual and legal circumstances of the review procedure must be promptly communicated in writing to the reporting person according to § 8 Section (3) Sentence 1 after the dispatch of the notices according to Section 5 by the review commission.

§ 10 Reports, Access to Files

The university leadership reports on procedures according to §§ 8 or 9 within the scope of its legal obligations. Ombudspersons or review commissions report on their procedures upon invitation from the president or the Senate, while preserving the confidentiality of the procedures and other legal protections regarding personal data or results. Additionally, the outcome of the procedure is communicated to affected scientific organizations and, if necessary, to third parties with a justified interest in the decision. In every case, the identity of the reporting person should be protected.

§ 11 Sanctions for Scientific Misconduct

(1) If scientific misconduct is proven, various sanctions, including employment-related, university-related, civil, or criminal sanctions, may apply. Details are specified in Annex 3.

(2) If the investigation reveals discrepancies related to the publication of scientific research results, the decision according to § 9 Section (5) must also include an order for correction. The correction must be promptly made in an appropriate manner. If such discrepancies arise after the issuance of the decision, the obligation to correct applies accordingly, unless the decision according to § 9 Section (5) specifies otherwise.

§ 12 Titles and Functional Designations

Titles and functional designations in this regulation apply to individuals of any gender.

§ 13 Entry into Force

This regulation for the regulation of good scientific practice and dealing with scientific misconduct comes into effect on the day after its announcement in the official publication of the university.

Jena, [Date]

Prof. Dr. Steffen Teichert President

Appendices

Annex 1 – Areas of Action for Good Scientific Practice

Annex 2 – Scientific Misconduct

Annex 3 – Sanctions for Scientific Misconduct

Fields of Action for Good Scientific Practice

1. Cross-Phase Quality Assurance, Methods, and Standards

- I. The research process should be accompanied by continuous quality assurance, aiming to adhere to discipline-specific standards and established methods and processes¹.
- II. The identification of relevant research questions is based on thorough reviews of the current state of research. The results of these reviews must be considered by researchers in the planning of their research projects. In this context, care must be taken to ensure the use of appropriate methods to avoid biases in data interpretation².
- III. To ensure good scientific practice, researchers at the university employ scientifically sound and comprehensible methods in accordance with the requirements of their discipline-specific research inquiries. To ensure the comparability and transferability of research results, researchers, in the development of new methods, research data collection, and the description of research results, pay special attention to the establishment of standards³.
- IV. Throughout the research process, researchers ensure a complete and comprehensible documentation of the obtained research results, including those that do not support the research hypothesis. No result selection takes place. This serves the verifiability and evaluability of the results. If there are specific recommendations for the latter, researchers adhere to the corresponding guidelines⁴.

2. Legal and Ethical Frameworks, as well as Usage Rights⁵

- I. Constitutional research freedom, as guaranteed by law, is a valuable asset, and researchers at the university handle it responsibly.
- II. Researchers take into account the rights and obligations arising from legal requirements or agreements with third parties. Where necessary, permissions or ethical approvals are obtained.
- III. In the context of their research projects, researchers consider the potential consequences of their research as well as the respective ethical aspects.

3. Scientific Publications

- I. Results from research activities are to be published and thereby contribute to the scientific discourse. The decision of whether, where, and how their results are made publicly accessible lies with the researchers. This decision must not be dependent on third parties. The decision, even against publication, should be transparently presented⁶. Exceptions are particularly permissible where the rights of third parties are affected, patent applications are pending, the research involves commissioned work, or it pertains to security-sensitive research.

¹ In accordance with the DFG Code, page 14, Guideline 7: Cross-Phase Quality Assurance

² In accordance with the DFG Code, page 15, Guideline 9: Research Design

³ In accordance with the DFG Code, page 17, Guideline 11: Methods and Standards

⁴ In accordance with the DFG Code, page 17, Guideline 12: Documentation

⁵ In accordance with the DFG Code, page 16, Guideline 10: Legal and Ethical Framework, Usage Rights

⁶ In accordance with the DFG Code, page 18, Guideline 13: Establishment of Public Access to Research Results

- II. Research results must be comprehensible according to discipline-specific customs and standards. To ensure this, researchers document the information relevant to the formation of a research result. These, as well as the research results themselves, must be protected from manipulation⁷.
- III. When research results are made publicly accessible, the mechanisms of quality assurance applied should be outlined. This is intended to ensure that other researchers can replicate or confirm the relevant results⁸.
- IV. Furthermore, the following principles should apply to publications⁹:
 - Researchers select the publication platform based on its quality, visibility, and credibility.
 - In addition to publications in journals and books, alternative communication channels can be utilized, such as repositories and blogs. Quality assurance should be considered even in other, non-traditional forms of publication.
 - The scientific quality of a contribution does not depend solely on the publication platform where it is made publicly accessible. However, researchers should assess whether a journal with a peer-review process is suitable for their publication.
 - Inappropriately fragmented publications are to be avoided.

4. Handling of Research Data

- I. In order to make publications comprehensible and research results reusable, researchers, whenever possible, make their research data publicly available in data repositories. This includes a complete description of the data and results, adhering to the FAIR principles ("Findable, Accessible, Interoperable, Re-Usable")¹⁰. Research data encompasses both research results and raw data, as well as the central materials underlying them and, if applicable, the research software used.

According to the FAIR principles:

- Data should be findable by both humans and machines (Findable).
- Accessibility through long-term archiving and the use of standard communication protocols, at least for metadata, should be ensured (Accessible).
- Data should be presented in a way that enables exchange, interpretation, and the combination of datasets, ensuring interoperability (Interoperable).
- Data and metadata should be structured to facilitate their reusability for future research (Re-Usable).

⁷ In accordance with the DFG Code, page 18, Guideline 12: Documentation

⁸ In accordance with the DFG Code, page 14, Guideline 7: Cross-Phase Quality Assurance

⁹ In accordance with the DFG Code, page 21, Guideline 15: Publication Outlet

¹⁰ In accordance with the DFG Code, page 18, Guideline 13: Establishment of Public Access to Research Results

- II. Researchers, whenever possible and reasonable, make documented agreements on the usage rights of generated data at the earliest possible stage of the research project, especially when multiple institutions are involved. The right to use the data primarily belongs to the responsible researcher who collects it. In the course of an ongoing research project, those with usage rights (especially in accordance with data protection regulations) also decide whether third parties should have access to the data.
- III. If restrictions arise regarding the disclosure of research data, researchers examine to what extent at least the disclosure of underlying methods (materials, software, workflows, etc.) is possible. If there are reasons not to make research data fully accessible, researchers provide a transparent explanation.
- IV. Depending on the specific field, research data is typically retained for a period of ten years¹¹. If shortened retention periods apply or data is not to be retained at all, researchers document the substantive reasons for this.
- V. The research process, including research data, is subject to data protection regulations, which researchers adhere to.
- VI. Researchers are responsible for preparing and storing research data in suitable disciplinary repositories. The university provides a solution for archiving. For the storage and publication of research data for which no suitable disciplinary repository has been found, a repository and long-term archiving solution is being developed in Thuringia.
- VII. Software programmed during the research process is made accessible, including its source code. This code should be documented and, if possible, citable.

5. Authorship for Scientific Publications

- I. The authors of a scientific text, data, or software publication make a genuine and comprehensible contribution to the content of the publication. Examples of such contributions include:
 - Development and conceptualization of the research project,
 - Elaboration, collection, acquisition, provision of data, software, or sources,
 - Analysis, evaluation, or interpretation of data, sources, and resulting conclusions, and
 - Manuscript writing.

Researchers agree on who should be the author of the research results. The agreement on the order of authors occurs in a timely manner, usually no later than when the manuscript is being formulated, based on transparent criteria, taking into account the conventions of each field.
- II. All participating authors jointly bear responsibility for the content of a publication and agree to the final version of the work to be published. Efforts should be made to ensure that research contributions are appropriately marked for correct citation by users.

¹¹ In accordance with the DFG Code, page 22, Guideline 17: Archiving

- III. If a contribution is not sufficient to justify authorship, support can be acknowledged in the form of footnotes, a preface, or in the acknowledgment section. Honorary authorship is not permissible. Similarly, a leadership or supervisory role does not justify co-authorship. The order of authorship is agreed upon among the researchers. Refusal to provide the necessary consent for publication can only be justified with verifiable criticism of data, methods, or results¹².

6. Confidentiality and Neutrality in Evaluations and Consultations¹³

- I. Researchers evaluating the scientific work of others are obligated to maintain confidentiality. This particularly includes refraining from disclosing to third parties and utilizing the content for personal use.
- II. Any potential bias should be disclosed promptly.
- III. This obligation includes the participation of researchers in advisory and decision-making bodies.

7. Supervision of Scientific Junior Staff (Students, Doctoral Candidates, and Postdoctoral Researchers)

- I. The imparting of good scientific practice is a central component of the training of scientific junior staff, in addition to technical skills. Adherence to this practice, including the provisions outlined in this ordinance, is communicated to the scientific junior staff by instructors and supervisors in the context of teaching and research.
- II. In the context of study, final, or qualification papers, a primary contact person is available for scientific junior staff. Supervision includes regular scientific advice and support, as well as discussions about the developmental steps of the work. Furthermore, integration into the academic environment is an essential part of supervision. Scientific junior staff, in turn, commit to responsible work and collegiality.
- III. Scientific junior staff regularly report—verbally, if necessary also in writing—on the progress of their research work.

8. Work Involving Humans

- I. The fundamental right to academic freedom ends when the rights of other individuals are violated, including considering the dignity of participants.
- II. Researchers have an ethical responsibility towards individuals participating in scientific investigations. This includes protecting the rights and integrity of participants. Potential risks and harms (physical and mental well-being, economic, legal, and social consequences) must be assessed in advance and minimized.

¹² In accordance with the DFG Code, page 20, Guideline 14: Authorship

¹³ In accordance with the DFG Code, page 21, Guideline 16: Confidentiality and Neutrality in Assessments and Consultations

- III. The basis for research involving humans is the personal consent of the participating individuals or their legal representatives.

9. Work Involving Animals

- I. Members of the university are aware of their responsibility for the life and well-being of animals as fellow creatures, according to § 1 Animal Welfare Act.
- II. The ethical dimension of this responsibility goes beyond the prohibition of purposeful killing of animals for educational purposes, § 46 (3) Sentence 1 Thuringian Higher Education Act, the promotion of methods and materials that can replace the killing of animals, § 5 (12) Thuringian Higher Education Act, or compliance with legal regulations for animal experiments, such as those from chemical, pharmaceutical, or environmental law. It obligates members of the university at every stage of their tasks, especially when choosing the topic and methods of work in research or teaching, to assess whether and to what extent a use that affects the life or well-being of animals is necessary and to initiate corresponding protective measures.
- III. In the context of the assessment according to paragraph II sentence 2, the possibility of abstaining from working with animals or using suitable alternatives, such as cell lines, should also be considered.

Specifications of Scientific Misconduct

1. Degrees of Fault

The statute identifies intent and gross negligence as degrees of fault that characterize scientific misconduct.

(1) Intent refers to the awareness of the impairment of the protected interest through one's conduct while simultaneously desiring its realization.

The awareness does not need to be in a specialized (legal or ethical) manner. It suffices that the acting person, through a "parallel evaluation in the lay sphere" has recognized the deviation from the required standard. Detailed knowledge of the wording of the violated legal or ethical norm is not necessary, nor is the exact location of the regulation.

Example: The awareness that one should not steal others' property is sufficient to assume intent. Knowledge that the offense of theft is regulated in § 242 StGB and focuses on possession rather than ownership is not required.

The desire can be very pronounced, for example, in intentional behavior. However, this need not be the case for intentional conduct. It suffices if the acting person knowingly accepts the impairment, such as in a "so be it" manner.

Example: Falsifying research data and secretly introducing them to hinder a competitor's professional success is intentional conduct. On the other hand, someone who knows about the inaccuracy of research results from other sources, such as their own, but does not disclose it, for instance, in the context of a peer review, still acts intentionally.

(2) Negligence means the disregard of the necessary care. Here, the acting person does not aim to realize the impairment but, in a blameworthy manner, relies on the belief that the impairment will not occur, as in a "it will be fine" attitude.

Example: Forgetting to turn off the high-voltage device after work hours; adopting some else's thoughts without proper attribution.

Gross negligence is the disregard of the necessary care to an extent that the misconduct must be evident to any reasonable person.

Example: Knowingly using false information or data, for example, in a grant application, constitutes gross negligence when done in the hope that the deception will not be uncovered.

2. Instances of Scientific Misconduct

(1) Scientific misconduct occurs when an individual engaged in scientific activities at the university intentionally or with gross negligence provides false information in a context relevant to science, wrongfully appropriates the scientific work of others, or interferes with the research activities of others.

(2) False information includes:

- a) Inventing scientifically relevant data or research results,
- b) Distorting scientifically relevant data or research results, particularly by suppressing or eliminating data or results obtained in the research process without disclosing it, or by distorting a presentation or illustration,
- c) Incongruent representation of an image and its accompanying statement,
- d) Incorrect science-related information in a funding application or as part of reporting obligations,
- e) Claiming authorship or co-authorship of another person's work without their consent.

(3) Unauthorized appropriation of others' scientific work occurs in the following cases:

- a) Undisclosed adoption of third-party content without the required citation ("plagiarism"),
- b) Unauthorized use of research approaches, research results, and scientific ideas ("idea theft"),
- c) Unauthorized disclosure of scientific data, theories, and knowledge to third parties,
- d) Assuming or groundlessly claiming authorship or co-authorship in a scientific publication, especially when there has been no genuine, comprehensible contribution to the scientific content of the publication,
- e) Distortion of scientific content,
- f) Unauthorized publication and dissemination to third parties as long as the scientific work, discovery, hypothesis, teaching, or research approach has not been published.

(4) Interference with the research activities of others occurs particularly in the following cases:

- a) Sabotage of research activities (including damaging, destroying, or manipulating experimental setups, devices, documents, hardware, software, chemicals, or other items needed by others for research purposes),
- b) Falsification or unauthorized removal of research data or research documents,
- c) Falsification or unauthorized removal of the documentation of research data.

(5) Scientific misconduct by individuals engaged in scientific activities at the university also arises - in the presence of intent or gross negligence - from:

- a) Co-authorship of a publication containing false information or wrongfully appropriated foreign scientific work,
- b) Neglect of supervisory duties when another person objectively fulfills the criteria of scientific misconduct as defined in sections 1 to 4, and this could have been prevented or significantly hindered by the necessary and reasonable supervision.

(6) Scientific misconduct also arises from the intentional involvement (in terms of instigation or assistance) in the intentional misconduct stipulated by this statute by others.

(7) Scientific misconduct by evaluators or committee members of the university occurs when they intentionally or with gross negligence:

- a) Improperly exploit for their own scientific purposes scientific data, theories, or knowledge that they have acquired in the course of their activities as evaluators or committee members,
- b) Improperly disclose to third parties, in violation of the confidentiality of the process, data, theories, or knowledge acquired in the course of their activities,
- c) Fail to disclose to the relevant authority facts or circumstances that may raise concerns about bias in the course of their activities.

(8) Scientific misconduct also occurs when an evaluator or a committee member of the university, in the course of their activities and with the intention of gaining an advantage for themselves or another person, does not disclose, contrary to better knowledge, facts from which scientific misconduct by the other person arises in the sense of sections 1 to 5.

3. Example Cases of Scientific Misconduct

Field of Action	Example of Intent	Example of Gross Negligence
Cross-Phase Quality Assurance, Methods, and Standards	Planning a Project Solely Based on Scientifically Unsubstantiated Methods	Significantly Incomplete Review of the Current State of Research
Legal and Ethical Frameworks, Usage Rights	Deliberate Disclosure of Protected Information of a Competitor for Harmful Purposes	Demand for Authorship Recognition as a Condition for Employment Extension
Scientific Publications	Translation of a scientific text and output as a separate text	Utilization of Student Ideas for own Scientific Presentation
Handling of Research Data	Falsification of Data for Attaining Scientific Advantages (Awards, Publications, Positions, etc.	Posting Non-Anonymized Data in Publicly Accessible Areas, e.g., the Internet
Authorship for Scientific Publications	Conscious Deception of Co-authors Regarding Own Results	Claiming Authorship Without a Substantive Contribution
Confidentiality and Neutrality in Reviews and Consultations	Utilization of Content from a Peer-Reviewed Rejected Submission for Personal Use Without Attribution	Repeated Disclosure of Contents from a Non-public Examination During Conference Break Conversations
Supervision of Early Career Researchers	Refusal of Supervisory Duties Despite Request	Failure to Recognize Fundamental Errors in Submitted Works
Work on Humans	Failure to Obtain Ethics Committee Approval for Projects with Sensitive Surveys Due to Time Constraints	Working with Knowingly Impaired Functional Devices
Scientific Research Groups	Knowingly Inappropriate Deployment of Team Members by the Leader	Release and Sending of Results by the Leader Without Prior Review
Cooperative Doctoral Programs	Conscious Exclusion of the Other Supervising Person from Access to Relevant Information, e.g., Interim Assessments	Repeated Accidental Failure to Communicate Interim Assessments to the Other Supervising Person Against Agreements or Regulations
Plagiarism	Utilization of Significant or Essential Thoughts from Others Without Attribution, Not Already Common Scientific Knowledge	Use of Others' Thoughts in More than Isolated but Less than Substantial Scope Without Attribution, Not Already Common Scientific Knowledge

Sanctions for Proven Scientific Misconduct

1. Determination and Assessment Based on the Circumstances of Each Case

The sanctioning of scientific misconduct is based on the circumstances of each individual case. Scientific misconduct has the potential to affect a variety of legally or ethically protected goods. In compensation, numerous measures can be considered to address the impact.

The circumstances of each case include not only the behavior that impairs protected goods but also corrective actions towards the university or other participants in the scientific community, such as self-disclosure or voluntary assistance in the investigation. Previous scientific achievements may also be taken into account in the individual assessment.

(a) The determination of an appropriate compensatory measure depends on which good is affected and which measure aims to protect that specific good.

(b) The assessment of the compensatory measure is based, in a second step, on the intensity of the impairment caused by the scientific misconduct. This can be determined along several dimensions, such as:

- Scope,
- Duration,
- Frequency,
- Collaboration involving multiple individuals or institutions, or
- Repetition.

In the correct assessment of the sanction, the appropriateness is crucial. Appropriateness is maintained when the impairment of protected goods due to scientific misconduct and the restriction of the rights of the affected individuals resulting from the sanctions are in a balanced relationship. Three aspects are particularly relevant in this context:

- The determination of the level of sanctions within an existing framework,
- The use of combined sanctions, or
- The consideration that certain sanctions, such as criminal sanctions, cannot be pursued by the university itself.

2. Types of Sanctions

Depending on the circumstances of each case and with the involvement of the respective responsible authorities, the following measures, among others, may be considered:

a. Employment-related Sanctions:

- Reduction or revocation of performance-related remuneration components,
- Revocation of leave due to urgent operational requirements,
- Admonition,
- Warning,
- Transfer,

- Termination of the contract with the consent of the affected individual,
- Ordinary termination,
- Extraordinary termination,
- Claims for damages arising from the employment relationship, or
- Correction of a work certificate.

b. Disciplinary Sanctions:

- Conducting a disciplinary proceeding with the determination of disciplinary measures, such as a fine, reduction in salary, or dismissal from service,
- Reduction or revocation of special performance-related benefits,
- Denial of business trips for events in the relevant scientific field,
- Denial of sideline activities related to scientific misconduct, such as reviewer, discussant, or examiner roles,
- Denial or revocation of the authority to enter into or supervise qualification agreements,
- Denial or revocation of the authority to supervise cooperative doctoral programs,
- Reassignment of personnel or material resources,
- Disciplinary claims arising from the civil servant relationship,
- Correction of the official evaluation, or
- Reduction, content modification, or termination of teaching assignments.

c. Other Civil Law Sanctions:

- Claims for surrender, particularly regarding scientific materials,
- Claims for removal or cessation, e.g., under copyright, personal rights, patent law, or competition law,
- Claims for the repayment of civil law scholarships, or
- Claims for damages or reimbursement of expenses from the university or third parties for personal or property damages.

d. Public Law Sanctions:

- Claims for surrender of information or data to the university,
- Obligation to participate in data protection proceedings,
- Imposition of restricted use of the university or issuance of a prohibition order,
- Revocation of the use of university parking areas,
- Claims for the repayment of public law scholarships, or
- Other public law claims, especially for compensation.

e. Academic Sanctions:

- Revocation of academic degrees, e.g., Diplom, Bachelor, or Master's degrees,
- Revocation of teaching authorization,
- Withdrawal or revocation of scientific publications along with the obligation to inform affected co-authors,
- Removal or marking of publications from the individual's academic CV,
- Correction of identified discrepancies in publications after the fact,
- Reporting the case to the Ombudsperson for Science, or
- Revocation of an honorary doctorate or other honorary positions from the university.

f. Funding-related Sanctions:

- Complete or partial withdrawal of funding, or
- Withdrawal or revocation of approval for funding applications.

g. Criminal Sanctions:

- Imprisonment, probation, or fines for the commission of criminal offenses, especially:
- Copyright infringements,
- Forgery of documents, including forgery of technical records,
- Espionage or alteration of data,
- Property offenses, such as theft or embezzlement,
- Financial offenses, such as fraud, subsidy fraud, or embezzlement,
- Unauthorized use of others' trade secrets, or
- Homicide or bodily harm, especially related to research participants.