VILNIUS UNIVERSITY
LIFE SCIENCES CENTRE

STUDY PROGRAMMES IN GENETICS
DESCRIPTION OF THE PROCEDURE FOR THE PREPARATION, DEFENCE AND STORAGE OF THESES

Approved by the Genetics Study Programmes Committee meeting held on 3 May 2022

Vilnius 2022

GENERAL PROVISIONS

The Description of the Procedure for the Preparation, Defence and Storage of the Theses in the Genetics Study Programmes under the Life Sciences Centre at Vilnius University (hereinafter – the Description), establishes the general principles for the preparation, defence and storage of the theses of the first- and second-cycle study programmes in Genetics at the Life Sciences Centre (LSC). The procedure and methodology guidelines have been prepared in accordance with the Regulations for the Preparation, Defence and Storage of Research Papers of Students Studying at Vilnius University, approved by Resolution No. S-2017-12-11[1] of the Senate of Vilnius University, and the Description of the Procedure for the Administration of Research Papers in Vilnius University Study Information System, approved by the Order No. R-512[2] of the Vice-Rector for Studies at Vilnius University.

Students in all fields of study at the LSC graduate from their studies after they prepare and defend their thesis.

Terms used in the Description:

A thesis is a research paper prepared independently by a student in compliance with the requirements for an analytical type of university study, demonstrating the student's ability to apply the knowledge acquired during their studies, to select and use the necessary scientific literature, apply the research methods, independently solve tasks, provide their own conclusions (mandatory) and recommendations (desirable), and to accurately describe the research in grammatically correct language.

Methodological guidelines for the thesis (hereinafter – Methodological Guidelines) are the guidelines for the preparation of the theses approved by the LSC Study Programmes Committee in the field of Genetics.

Embargo Period is a temporary restriction placed during the months following the defence of the thesis, where public access to the electronic version of the thesis document is restricted.

[1] *Regulations for the Preparation, Defence and Storage of Research Papers of Students Studying at Vilnius University.* Approved by Resolution No. S-2017-12-11 of 19 December 2017 of the Senate of Vilnius University; consolidated version valid as of 18 November 2020 (Resolution No. SPN-75 of 18 November 2020 of the Senate of Vilnius University). Available online: https://www.vu.lt/studijos/studentams/studijas-reglamentuojantys-dokumentai

[2] *Description of the Procedure for the Administration of Research Papers in the Vilnius University Study Information System.* Approved by Order No R-512 of 22 November 2017 of the Vice-Rector for Studies at Vilnius University; consolidated version valid as of 18 November 2020 (Order No R-457 of 18 November 2020 of the Vice-Rector of Studies of Vilnius University). Available online: https://www.vu.lt/studijos/studentams/studijas-reglamentuojantys-dokumentai#vilniaus-universiteto-teises-aktai

EPAS (*Lithuanian acronym*) – Electronic Coincidence Identification System) is an electronic plagiarism checking system (a computer-based system to detect signs of plagiarism).

A guarantee is a document signed by the student to confirm that the thesis has been prepared in good faith and independently.

The Thesis Defence Committee (TDC) – this committee is formed based on the proposal of the head of the unit implementing the study programme and approved by the Rector or the Vice-Rector of the University. It is composed of competent specialists in a relevant field of study: researchers and lecturers, practitioners, professionals and representatives of the social partners, whose education or the activity of the represented organisation is related to the field of study. The TDC shall be chaired by a person, whose main place of work is at another research and higher education institution.

Plagiarism is the misappropriation of another person's authorship, i.e. the presentation (use) of the copyrighted text or part thereof without reference to the original author and source or with inappropriate reference (non-compliant citation) by means of a misleading link.

PREPARATION OF THE THESIS

A thesis is defined as a piece of research that is analytical in nature. An analytical thesis is a paper in which a scientific method is used to reveal the degree to which a topic has been researched, an object of the research is identified, the aim, objectives and methods of the project are formulated, the results of the research are substantiated, the conclusions are made, and the literature and sources used in support of the thesis are specified. The results of the research may be obtained by performing experiments on cells or experimental organisms, by examining samples of human or other organisms collected during clinical or field trials, or by bioinformatic analysis or meta-analysis of the results obtained by other researchers. The thesis must be prepared in accordance with the principles of the Code of Academic Ethics of Vilnius University, that are applicable to all members of the academic community at the University. The thesis must be written in grammatically correct language, in Lithuanian or English (where the main language of the student, the supervisor or adviser is other than Lithuanian).

The author is solely responsible for the content and quality of the thesis. A student is not permitted to defend a thesis that does not comply with the Methodological Guidelines of the field of study, or has not been prepared independently and in good faith.

The student and the supervisor must ensure that (1) experimental work with animals satisfies the legal framework for animal experimentation; (2) experimental work with humans satisfies the legal framework for human experimentation; (3) research on a specific species of organisms has the necessary permits from the Environmental Protection Agency; and (4) field research in protected areas is coordinated with the Administration or staff responsible for those areas. The student must

have available all the necessary permits/authorisations (copies thereof) and their identity document while the research is being conducted.

The following competences must be acquired and demonstrated by the student during the preparation and defence of their thesis, confirming their ability to:

- analyse and solve genetic problems, formulate scientific hypotheses and propose reasonable ways of testing them.
- critically analyse scientific literature, building on existing scientific knowledge and proposing new research directions.
- exchange scientific ideas with colleagues and be able to work independently and as part of a research team.
- learn genetic testing methods and understand their applications and limitations.
- conduct scientific experiments independently, critically analyse and evaluate the data obtained, and carry out statistical analysis.
- describe research in concise, correct language and provide reasoned conclusions.
- present the results of the research in a concise, clear and reasoned manner within the allocated timeframe.
- participate in a scientific debate and be able to use scientific reasoning to support their opinion.

The proposed thesis topics and supervisors are made public. The student has the right to propose a topic that corresponds to their field of study, which must be approved by their supervisor. Lecturers, researchers and doctoral students at Vilnius University and other research institutions are permitted to supervise the thesis. There can only be one supervisor. A thesis adviser can also be appointed. The student must choose a thesis topic and register it in accordance with the procedure and deadlines set by the Study Programmes Committee.

The supervisor advises the student on various methodological and subject-related issues related to the thesis. The frequency and method of communication with the supervisor should be mutually agreed between the student and the supervisor. The student must obtain the approval of the supervisor for every major choice/decision made in the development of the thesis.

The thesis topics (including specifying the student and the supervisor), are approved by the Head or Deputy Head of the LSC.

SUBMISSION OF THESES FOR ASSESSMENT AND DEFENCE

Uploading theses on the Vilnius University Study Information System (VUSIS)

Students (using the access granted to them) must upload the correctly prepared theses and their metadata, together with the completed Guarantee form, onto the VUSIS for storage at least 7 (seven)

business days prior to the start of the defence sessions of the final theses in the relevant study programme. It is not allowed to defend or evaluate a thesis that has not been uploaded to the VUSIS.

After the student uploads the electronic document to the VUSIS, the study programme administrator will confirm via the system – within a certain time, but not later than 5 (five) business days before the start of the defence of the thesis – that the uploaded and described thesis complies with the requirements (i.e. the format of the thesis is correct, the summary is correct, and other metadata are filled in correctly).

Once uploaded, the content of the electronic document (in PDF format), may only be amended with the consent of the supervisor. In order to amend the document, the student must submit a written request to the Chair of the Study Programmes Committee, no less than 5 business days before the date for the defence, stating the reasons for the amendment. This request must be signed by the supervisor (provided the supervisor agrees with the amendment). The decision to agree to change the content of the document shall be taken by the Chair of the Study Programmes Committee.

Permission to defend the thesis

Final theses may only be defended by the students who have completed the entire study programme. The thesis can only be defended if the thesis supervisor decides that the thesis has been properly prepared, is grammatically correct, and meets the Methodological Requirements for theses. Any specimens of plants, fungi and animals collected and processed during the research must be handed over to the VU Museum of Zoology or the Herbarium for storage, or in exceptional cases, to other scientific institutions, with the permission of the head of the relevant academic department. All research material (preparations, protocols, measurement data, laboratory diaries, etc.) must be handed over to the laboratory where the thesis research was carried out.

Before making a decision on whether to allow the thesis to be defended, the thesis supervisor must become acquainted with the computer verification report in EPAS and all of the computer verification information for plagiarism.

If plagiarism is identified, the thesis cannot be defended, evaluated or published. In such a case, the student will be subject to a penalty in accordance with the procedure laid down in the Study Regulations.

The student will be informed of the decision whether or not they will be able to defend the thesis no later than 7 (seven) business days prior to the scheduled start of the thesis defence. The decision shall be recorded in the supervisor's feedback using a prescribed format (Appendix 1). The decision of the thesis supervisor to authorise the thesis defence shall be confirmed in the VUSIS.

If the supervisor decides that the thesis is inadequate and cannot be defended, or if the supervisor refuses to accept the thesis on the grounds that it has been prepared without due reference to the supervisor, the student has the right to apply to the TDC for permission to defend the thesis. Such an application and the thesis must be submitted to the TDC not later than 1 (one) day after the student has been informed of the supervisor's decision to not allow the thesis to be defended or the supervisor has refused to accept it. After considering the student's reasons, the TDC will decide whether to allow the student to defend the thesis. This decision must be taken at least 5 (five) business days prior to the scheduled thesis defence.

The Director or Deputy Director of the LSC will issue an order authorising the defence of theses based on it satisfying the following conditions:

1. The student has completed the full study programme.
2. The thesis has been uploaded to the VUSIS.
3. The supervisor or the TDC has given permission for the thesis to be defended.

Reviewing the thesis

Theses can be reviewed by the employees of different LSC institutes, other VU departments and institutions, and representatives of social partners.

The Chair of the Study Programmes Committee will appoint a reviewer in accordance with the procedures laid down by the Study Programmes Committee at least 5 (five) business days prior to the defence of the thesis. A member of the TDC is not permitted be a reviewer.

The study programme administrator must enter the information about the appointed reviewer into the system not later than at least 24 hours prior to the thesis defence.

The reviewer must submit the thesis feedback (review) using the form specified in Appendix 2, by email to the student (using the email address provided by the University), at least 24 hours before the thesis defence and to the study programme administrator, who shall ensure that the review is submitted to the TDC.

DEFENCE AND ASSESSMENT OF THESES

Procedure for the defence of theses

The defence of theses is public (except when a thesis is defended in a closed meeting), and takes place at the end of the spring semester during the final assessment period of students (early June). The exact date for the presentation and defence of the thesis is published on the LSC website, in the section "Studies".

At the request of the thesis supervisor, the Chair of the Study Programmes Committee, or a representative of the social partner at whose company the thesis was prepared, the thesis, the results

of which are not made public or disclosed, can be defended in a closed meeting of the TDC. Permission for a closed defence will be issued under the authority of the Head or Deputy Head of the LSC after receiving approval from the Head or Deputy Head of the LSC and the Chair of the TDC. In addition to the members of the TDC and the student, the supervisor and the reviewer of the thesis may attend the closed thesis defence meeting. Participants in a closed thesis defence meeting are required to sign a confidentiality agreement.

One day before the thesis defence, the study programme administrator will submit the final theses to the TDC, together with the feedback from reviewers and the computer verification reports for plagiarism (the reports are provided only upon the request of the TDC).

Before the thesis defence meeting, the members of the TDC shall discuss the procedure for the assessment of the theses, the run order for the defence of the theses, and the agenda of the defence meeting. The Chair of the TDC proposes a member of the TDC to act as a substitute for the Chair in the event that the Chair is unable to perform their duties. At the beginning of the meeting, the Chair (or substitute) of the TDC will introduce the members of the Committee, the rules of procedure of the Committee, and the order and procedure by which the thesis will be defended.

Order of defence of the theses

1. The Chair of the TDC will introduce the topic, the supervisor and the reviewer of the student's thesis to the members of the Committee and the audience, and then give the floor to the student.

2. The student then presents the thesis. It is recommended that the presentation of the bachelor's thesis should take up to 10 minutes and the master's thesis – up to 12 minutes. During the presentation, the student will introduce the aim of the thesis, point out the specifics of the methodology and substantiate their findings. The format of the presentation must comply with the requirements for presentations at scientific conferences or seminars.

3. Anyone present at the defence may ask the student questions on the topic of their thesis. The student is required to answer these questions. On average, it is recommended to allocate up to 3 minutes for questions and answers for bachelor's and up to 5 minutes for master's students.

4. After answering the questions, the floor is given to the reviewer, who presents the main conclusions of the review, or if the reviewer is not present, the Chair of the TDC or their nominee will perform this task.

5. The student will have the opportunity to respond to the reviewer's comments.

Thesis presentation

During the thesis defence, the author of the thesis will briefly present the thesis, to identify the research problem, the aim and objectives of the thesis, briefly describe the subject matter, reveal the

findings, discuss the reliability of the methods used, present the conclusions, make recommendations, and answer questions from the members of the TDC and other persons participating in the defence. The student is required to prepare a presentation for the defence of their thesis (preferably using MS PowerPoint). Presentations should be uploaded on the computer before the start of the defence meeting (it is recommended to check that the presentation can be opened and that the slide format will provide a clear view of the text, figures and tables). If the time allocated for the presentation of the thesis is exceeded, the Chair of the TDC has the right to interrupt the presentation of the thesis after a prior warning.

The thesis topic that has already been approved cannot be challenged during the thesis defence.

Assessment of the theses

The members of the TDC will assess the thesis based on the criteria set out in Appendix 3, and it is recommended that they take into account the opinions of the reviewer and the supervisor.

Each member of the TDC will assess the thesis, submitting their assessment to the TDC that will make the overall decision. The final assessment of the thesis will be based on the average of all the assessments proposed by the members of the TDC (rounded up to the nearest whole number). The majority of the members of the TDC must agree with the assessment. If the supervisor of the thesis is also a member of the Committee, they will not be involved in the assessment decision. In the event of a tie among the members of the TDC regarding the assessment of the thesis, the Chair of the TDC will have the casting vote. In cases where the Chair of the TDC is unable to vote because they are the supervisor of the student defending their thesis and there is a tie among the members of the TDC regarding the assessment of the thesis, the assessment will be determined by the assessment of the Deputy Chair of the Committee elected by a vote of the members of the Committee.

The decision of the TDC regarding the assessment of the thesis is final and not subject to appeal. In the case of procedural irregularities in the defence of a thesis, which could have affected the assessment of the thesis, the student will have the right to appeal to the LSC Dispute Resolution Committee, no later than on the next business day after the defence, by filing an appeal according to the procedures established in the regulations of the LSC Dispute Resolution Committee. The appeal must identify the specific infringement of the thesis defence procedure and the circumstances of said infringement.

After a successful defence of a thesis, a worksheet must be completed with the score for the thesis, the access status of its storage in the eLABa system and the applicable Embargo Period (if any). The study programme administrator enters the information of the worksheet into the system. The worksheet must be signed by all members of the TDC. On the basis of the worksheet, a thesis defence

protocol is prepared in the VUSIS by which the student is then awarded a bachelor's and/or master's degree.

The student shall be allowed to defend the thesis for a second time only after resuming their studies (the next academic year). If the student fails to defend the thesis the second time, the student must write a new thesis after resuming their studies.

STORAGE OF THE THESIS

Following the defence, electronic versions of the theses uploaded to the eLABa are stored in accordance with the terms and procedures set out in the eLABa regulations.

The access status of the final thesis storage in the eLABa is determined by the TDC, based on the recommendations of the supervisor. All defended theses must be made publicly available in the eLABa, unless the supervisor of the thesis decides not to publish the thesis in this repository. Such a decision may be taken if:

- a thesis contains confidential information;
- the uploading and/or publishing of a thesis would infringe the copyrights of the author, the eLABa system administrator or other copyright holders;
- any uploading and/or publishing of a thesis would violate the privacy rights of data subjects.

If there are no reasons that prevent a thesis from being published in the eLABa, but a student requests the Embargo Period, the TDC decides whether an Embargo Period is justified and will determine its term.

The content of the electronic document uploaded to the system may only be changed in exceptional cases and only with the approval of the supervisor, but no later than before the publication of the assessment for the thesis. Electronic documents shall be exported from the system to the eLABa system within 14 (fourteen) calendar days from the date of the defence, unless a decision is taken not to publish the thesis, in which case only the metadata of the electronic document shall be published in the eLABa.

Appendix 1

Genetics Study Programme Thesis
FEEDBACK FROM THE SUPERVISOR

1. Student's first name and surname:

2. Thesis title:

3. Student's ability to independently solve tasks and apply acquired knowledge:

4. Student's ability to independently select and use scientific literature:

5. Student's independent laboratory skills:

6. Was all the planned research personally conducted by the student *:

** if not all, please indicate the reasons for this; please also indicate if the student has been allowed to use data from experimental studies by other persons*

7. If a scientific publication will be published on the basis of the thesis, where would the student's name be mentioned *(please check the box)**:

In the acknowledgements ☐	Among co-authors ☐	First in the list of authors ☐

* *taking into account the ethical requirements for research publication (https://publicationethics.org/files/COPE_DD_A4_Authorship_SEPT19_SCREEN_AW.pdf; https://oir.nih.gov/sites/default/files/uploads/sourcebook/documents/ethical_conduct/guidelines-authorship_contributions.pdf)*

8. The extent of your (**supervisor's**) work and input *(check all relevant boxes of your input in the thesis preparation; an unchecked box means that the student has done this part completely independently)*:

Formulating a research idea ☐	Planning research ☐	Conducting research ☐
Analysis of results ☐	Scientific editing of the text ☐	Conclusions ☐

9. Defence of the thesis is authorised/not authorised *(please delete as appropriate*)

10. Proposed assessment of the thesis:

First name and surname of the supervisor signature date

Appendix 2

Genetics Study Programme Thesis
REVIEW

1. Student's first name and surname:

2. Thesis title:

3. Assessment of the structure/organisation of the thesis:

Seq. No.	Assessment questions	Compliance with requirements[1]
1	Are all the required parts of the thesis present?	
2	Does each part of the thesis contain only the information that must be provided?	
3	Does each paragraph of the thesis focus on and explore a single idea?	
4	Are there any spelling, punctuation and proofreading errors in the thesis?	
5	Are all the sentences simple and clear, with no ambiguities?	
6	Does the thesis contain any inaccurate descriptors such as “huge difference”, “increased by several times”, etc.? These should be corrected to “ten times different”, "increased 4.25 times”, for example)	
7	Are the tables and figures well-prepared, and are their titles and legends informative and self-explanatory without reading the main text?	
8	Is each table and figure referred to in the text of the thesis?	
9	Is there any overlap between the material in the tables and figures and the text?	
10	Are the references cited and the List of References prepared according to the requirements (APA 7th edition)?	

[1] Specify assessment: fully comply – 1 point, partially comply – 0.9–0.1 points, non-compliant – 0 points

4. Assessment of the content of the thesis:

Eil. No.	Assessment questions	Compliance with requirements[1]
1	Is the aim of the thesis stated clearly, concisely, correctly and in full?	
2	Is the literature review sufficiently detailed and relevant to the topic of the thesis?	
3	Does the methods section describe all stages of the study?	
4	Are the results presented in such an order that helps the reader understand the logic and process of the research?	
5	Is the data analysis and interpretation appropriate?	
6	Is the text consistent with the results provided in the tables and infographics? The presented data must support the conclusions provided in the text.	
7	Are all the data presented in the results section covered in the discussion section?	
8	Is the information provided in the results section repeated in the discussion, when in fact, it should not be?	
9	Is the discussion structured in such a way that it reasonably leads to the conclusions?	
10	Do the conclusions summarise the entire research and are they based on the results obtained rather than on assumptions?	

[1] Specify assessment: fully comply – 1 point, partially comply – 0.9–0.1 points, non-compliant – 0 points

5. Comments[2], notes and questions:

[2] Comment on those parts of the thesis that only partially comply or do not comply

6. Proposed grade for the thesis[3]:

[3] The score for the structure/organisation of the thesis should account for around 30% and for the content – 70% of the final assessment.

First name and surname of the reviewer signature date

Appendix 3

Assessment criteria
recommended to members of the Thesis Defence Committee in the Genetics Study Programmes

Assessed section	Excellent (10)	Very good and good (9, 8)	Satisfactory (6,7)	Poor (5)
Content of the presentation				
Introduction and presentation of the aims of the research	- A clear statement of the main problem and the tested hypothesis - The text on the slide(s) is structured, with individual sentences or parts of sentences bulleted/marked - Appropriate illustrations are used to support the main points	- A clear statement of the main problem and the tested hypothesis - The text on the slide is structured, with individual sentences or parts of sentences bulleted/marked - Most of the illustrations or figures are informative and support comprehension of the text	- Clearly too little or too much information is provided - Unstructured text - Absence of illustrations or they are used unnecessarily (unrelated to the text)	- This section or its key elements are missing - The main problem and hypothesis are missing or are not clearly formulated - Excessive use of unrelated figures/information
Presentation of the research methods	- Optimal amount of information is provided -Basic experiments are explained - The text on the slide(s) is structured, with individual sentences or parts of sentences bulleted/marked - Illustrations used to explain the methods - The student has a full understanding of the methods used	- The principal methods are explained, preferably by means of a principle diagram or other suitable illustration - The text on the slide(s) is structured, with individual sentences or parts of sentences bulleted/marked - The student understands the basic principles of the methods used	- This section is presented, but there are far too many details - Too much text on the slides - Absence of illustrations that could explain the methods used (diagrams of experiments, etc.) - Student has only a minimal understanding of the methods used	- Methods are not presented or essential parts are missing - Redundant text - Too little explanation - The student does not understand/cannot adequately explain the methods used in the thesis
Presentation of results	- Results are presented in a coherent and logical manner - Optimal amount of information (text and illustrations) is provided - All illustrations are with captions, are explained, units of measurement are specified, etc. - Infographics are easy to understand and interpret, a consistent presentation style is maintained for the whole presentation - The accompanying text highlights the main results of the research	- Results are presented in a coherent and logical manner - Almost sufficient amount of information is provided - Illustrations are properly prepared and fully explained (1-2 illustrations may not meet these requirements) - Infographics are easy to understand and interpret - The accompanying text is short, but the most important points are mentioned	- The presentation of results lacks consistency - Too much or too little infographics/tables - Illustrations are too complex and difficult to understand - Missing explanations, infographics or tables are simply "cut and pasted" from the thesis, not adapted for the presentation - Accompanying text is insufficient or of little value	- Inconsistent presentation of results - Illustrations (infographics, figures) are without explanations - Only infographics or tables are provided, accompanying text is missing
Discussion of results and conclusions	- The main results of the research are briefly discussed - The conclusions follow logically from the discussion of the results	- Key conclusions are provided and discussed - Results are repeated unnecessarily - Discussion is poorly linked to conclusions	- Discussion is omitted - Results are repeated, but analysis is missing - The conclusions summarise only part of the research	- Discussion is omitted - Results are repeated, but analysis is missing

	- Conclusions are clear, summarise the whole research and are based on the results	- The wording of the conclusions is not very clear, but conclusions summarise the entire research and are based on the results		- Conclusions are vague and summarise only part of the research or are not based on the results
Answering questions	- All questions were answered - The student fully understands the significance of the research and the main results	- Most questions were answered - The student has a good understanding of the significance of the research and the main results	- Some questions were answered - The student does not have a good understanding of the aim and main results of the research	- Most or all questions were not answered - The student has only a minimal understanding of the aim and the main results of the research
Presentation quality				
Formatting of presentation slides	- Font size is appropriate - Font is appropriate - The colour scheme makes the presentation easier to understand, while animation elements and additional infographics are used to emphasise key points - All slides maintain an appropriate balance between text and other information formats	- Font size is appropriate - Font is appropriate - The colour scheme of the presentation is appropriate, with moderate use of animation elements - Most slides maintain a good balance between text and other information formats	- Font size is appropriate - Font is appropriate - The colour scheme of the presentation makes it difficult to easily understand/see the material presented, excessive infographics or animation elements are sometimes distracting - Too much text on most slides	- Font is too large or too small - Font is difficult to read (wrong font chosen) - The colour scheme in the presentation makes it difficult to easily understand/see the material, excessive use of infographics or animation elements - Too much text information, not enough other information formats
Verbal presentation skills	- The text of the presentation is well thought out and prepared, the student does not use notes during the presentation - The presentation focuses on the main points, making it easy for the audience to understand the main conclusions - Parasitic spoken words and sounds are used only occasionally - All sentences are complete and well formulated - Speech is clear, audible and with appropriate intonation - The audience's attention is drawn to the main points by varying the tone and pace of the speech, emphasising the main ideas or parts of the sentence	- The text of the presentation is well thought out and prepared, and the student only occasionally glances at the notes (on the sheet or computer screen) - Ideas are presented coherently and clearly, and listeners can easily grasp the main conclusions - Parasitic spoken words and sounds are used only occasionally - Most sentences are fully formulated thoughts - The student is sufficiently audible or uses a microphone, pronunciation is clear - The audience's attention is drawn to the main points by varying the tone and pace of the speech, emphasising the main ideas or parts of the sentence	- The text of the presentation is well thought out and prepared, but the student reads it (from a sheet of paper or on a computer screen) - During the presentation, the student easily gets lost or "jumps" from one idea to another - Parasitic spoken words ("like", "well", etc.) or sounds ("aaa", "err", etc.) are often used. - Most sentences have a logical ending, but there are pauses between or in the middle of sentences - Speech is monotonous, with only occasional emphasis or variation - Pronunciation is relatively clear	- The presentation has not been properly planned in advance - The student fails to convey the purpose of the presentation to the audience or to explain the results and conclusions - Parasitic spoken words ("like", "well", etc.) or sounds ("aaa", "err", etc.) are often used. - Sentences are often unfinished - The student is inaudible, does not use a microphone (if necessary), pronunciation and articulation of thoughts is inaccurate, long pauses between sentences or in the middle of sentences - Speech is inexpressive, monotonous, and does not provide the right emphasis
Non-verbal presentation skills	- The student speaks directly to the audience, maintaining eye contact - Uses a laser pointer to emphasise key points appropriately	- The student speaks directly to the audience, tries to maintain eye contact - Most often uses a laser pointer appropriately - Uses appropriate gestures	- The student sometimes turns away from the audience when speaking - Does not use a laser pointer or uses it incorrectly, producing a distraction - Gestures distract listeners	- The student speaks turned away from the audience (e.g. the student is looking at the slides on the screen) or tries to avoid contact with the audience

	- Speech is reinforced by appropriate gestures			- Reads the text from slides, points with a pointer to the words they are reading - Gestures distract listeners
Compliance with the regulations	- The student adheres to the regulation, making full use of the time available for the presentation	- Presentation is 1-2 minutes too long or too short	- Presentation is too short (only about half of the allocated time is used) or too long (the Chair of the meeting gives warning that time limit has been exceeded)	- Presentation is too long and the chair of the meeting terminates it because time limit has been exceeded