

POSITION ABOUT THE MASTER'S THESIS

NAO "Aktobe Regional University named after K.Zhubanov"

“APPROVED”

**Chairman of the Board – Rector of Aktobe Regional University named after K.Zhubanov
L.Karabassova**

“30” 11 2022

POSITION ABOUT THE MASTER'S THESIS

Publication for official use

Aktobe, 2022

THIS PROVISION HAS BEEN DEVELOPED

Director of the Department of Science and Innovation N.Zhanturina

APPROVED AND PUT INTO EFFECT

**Chairman of the Board-Rector of Aktobe Regional University named after K.Zhubanov on
the basis of the decision of the Academic Council (Protocol №5 of "30" ____11____2022 g.)**

VALIDITY PERIOD: until a new one is replaced

INTRODUCED: instead of version 2.0

This Regulation may not be reproduced in whole or in part, replicated or distributed as an official publication without the official permission of the Rector of the ARU named after K.Zhubanov.

These Regulations may be transferred to third parties with the official permission of the rector of the ARU named after K.Zhubanov.

I SCOPE OF APPLICATION

This regulation establishes general requirements for the structure, rules of registration and organization of the procedure for defending master's theses in all educational programs.

This regulation is a mandatory guideline for undergraduates, teaching staff, and structural units.

2 REGULATORY REFERENCES

This Regulation has been developed in accordance with the following regulatory documents:

2.1 The Law of the Republic of Kazakhstan dated July 27, 2007 №319-III "On Education" (with amendments and additions dated July 14, 2022 №141-VI).

2.2 Rules for the organization of the educational process on credit technology of education. Order of the Ministry of Education and Science of the Republic of Kazakhstan (hereinafter referred to as the Ministry of Education and Science of the Republic of Kazakhstan) dated 20/04/2011 №152 (with amendments and additions dated September 23, 2022 №79).

2.3 Model Rules for the activities of educational organizations implementing educational programs of higher and (or) postgraduate education. Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 30, 2018 №595 (with amendments and additions dated November 18, 2022 №145).

2.4 The State mandatory standard of higher and postgraduate education. Order of the Ministry of Internal Affairs of the Republic of Kazakhstan dated 20/04/2022 № 2.

2.5 Code of Academic Integrity for Students, Teachers and Staff of the K.Zhubanov ARU (decision of the Academic Council, Protocol No. 13 dated 12/08/2020).

2.6 Order of the Minister of Education and Science of the Republic of Kazakhstan dated June 17, 2015 №391 "On approval of qualification requirements for educational activities and a list of documents confirming compliance with them" (with amendments and additions dated 24/11/2022 №152).

3 GENERAL PROVISIONS

3.1 The final certification is at least 12 academic credits in the total volume of the master's degree program in scientific, pedagogical and specialized areas and is carried out in the form of writing and defending a master's thesis.

A master's thesis is a summary of the results of an independent research work of a graduate student on one of the relevant topics of a specific educational program, completed in accordance with the established form. It should demonstrate the maturity of the graduate as a researcher who is able to creatively formulate and solve scientific problems of the specialty.

3.2 The Master's thesis is the final result of the research or experimental research work of the graduate student.

3.3 The Master's thesis is a graduate thesis of scientific content, which has an internal unity. The dissertation presents the results of independent scientific research on a topic relevant to the current state of science.

3.4 The purpose of the master's thesis is to demonstrate the level of scientific qualifications of the graduate student, the ability to independently conduct scientific research, to test the ability to solve specific scientific problems, knowledge of the most general methods and techniques for their solution.

3.5 The Master's thesis reveals the level of scientific qualification of the graduate student and the degree of mastery of the methodology of scientific knowledge in accordance with the requirements of the State Educational Standard of the Republic of Kazakhstan.

3.6 Within two months after enrollment, each master's student is assigned a supervisor to lead the master's thesis.

3.7 The supervisor and the research topic of the undergraduate are approved by the order of the Rector of the University on the basis of the decision of the Academic Council.

3.8 The supervisor of the master's student must have the academic degree of "Candidate of Sciences", or "Doctor of Sciences", or "Doctor of Philosophy (PhD)", or "Doctor of profile", or the academic degree of "Doctor of Philosophy (PhD)", or "doctor of profile", or the degree of "Doctor of Philosophy (PhD)", or "doctor by profession", corresponding to the profile of the requested field, with at least three years of scientific and pedagogical experience, who is the author of 5 scientific articles over the past five years in publications included in the List of scientific publications recommended for publishing the main results of scientific activity, approved by the authorized body in the field of education and science and 1 scientific article in an international peer-reviewed scientific journal with an impact factor according to JCR (JSR) data or indexed in one of the databases Science Citation Index Expanded, Social Science Citation Index

or Arts and Humanities Citation Index in the Web of Science Core Collection (Web of Sciences Core Collection) or a CiteScore (Sitiescore) percentile of at least 25 in the Scopus database.

The scientific guidance of undergraduates in the relevant field involves, among other things, specialists who meet the 8th level of the national qualification framework with at least 3 years of work experience.

If necessary, scientific consultants in related fields of science may be appointed.

3.9 An attestation commission for educational programs is established to conduct the final attestation of students.

3.10 The Chairman and the composition of the attestation commission are approved by the Rector's order based on the decision of the Academic Council no later than February 10 of the current academic year and are valid during the current calendar year.

3.11 The Chairman of the attestation commission is appointed from among professors, associate professors, scientists, experienced production specialists with practical experience, corresponding to the profile of graduates, and not working at this university.

3.12 The composition of the attestation commission consists of professors, associate professors, and highly qualified specialists who correspond to the profile of the graduates.

3.13 The quantitative composition of the attestation commission is determined by the department.

3.14 The final attestation is carried out within the time limits stipulated by the academic calendar and working curricula of educational programs in the form of a master's thesis defense.

3.15 Admission to the final attestation of undergraduates is issued by the order of the Dean of the faculty according to the list no later than 10 days before the start of the final attestation and submitted to the office of the registrar and the attestation commission.

4 REQUIREMENTS FOR A MASTER'S THESIS

4.1 The main results of the master's thesis must be presented in at least two publications or one publication in a publication included in the List of scientific publications recommended by the authorized body or one publication in a journal included in the scientific databases Web of Science/Scopus.

4.2 Research work in the scientific and pedagogical master's degree should:

- 1) correspond to the profile of the master's degree program in which the master's thesis is being conducted and defended;
- 2) be relevant, contain scientific novelty and practical significance;
- 3) be based on modern theoretical, methodological and technological achievements of science and practice;
- 4) be performed using modern scientific research methods;
- 5) contain research (methodological, practical) sections on the main protected provisions;
- 6) be based on best practices in the relevant field of knowledge.

4.3 Experimental research work in a specialized master's degree program should:

- 1) correspond to the profile of the master's degree program in which the master's thesis is being conducted and defended;
- 2) be based on modern achievements of science, technology and production and contain specific practical recommendations, independent solutions to management tasks;
- 3) be performed using advanced information technologies;
- 4) contain experimental research (methodological, practical) sections on the main protected provisions.

4.4 The work on the master's thesis of the graduate student should be carried out according to the calendar schedule (Appendix 1) under the supervision of the supervisor.

4.5 The Master's thesis must be checked for plagiarism by the expert commission of the university or the National Center for State Scientific and Technical Expertise for checking master's theses for plagiarism.

5 CONTENT AND STRUCTURE OF THE MASTER'S THESIS

5.1 The Master's thesis should contain fundamentally new material, including a description of new factors, phenomena, or a generalization of previously known positions from other scientific positions or in a new perspective.

5.2 The content of the master's thesis should reflect the initial prerequisites of scientific research, its progress and the results obtained. The paper should provide convincing arguments in favor of the chosen concept. The points of view that contradict it should be subjected to a comprehensive analysis and critical evaluation.

5.3 Structural elements of the Master's thesis:

- Title page (Appendix 2);

- Russian Russian language - one-page resume in Kazakh – for works protected in Russian or English / resume in Russian - for works protected in Kazakh or English;
- content indicating the pages;
- a list of abbreviations, symbols, and designations (if necessary);
- Introduction;
- the main part, consisting of sections, subsections;
- conclusion;
- list of references;
- the application;
- print of the publication.

5.4 The summary should contain information about the relevance, purpose and objectives, main ideas and conclusions of the research, the degree of novelty and practical significance of the results obtained, information about the volume of the master's thesis and the amount of illustrative material.

5.5 The introduction should reflect the relevance of the work, the purpose of the work, the objectives of the work, methods, scientific novelty, practical and theoretical significance and information about the volume and quantity of illustrative material.

5.6 The conclusion should contain brief conclusions based on the results of the dissertation research.

6 RULES FOR THE DESIGN OF A MASTER'S THESIS

6.1 The technical requirements for the design of a master's thesis must meet the criteria traditionally set by the authorized body of higher and postgraduate education.

6.2 The design of the bibliography must also meet the criteria for dissertations (Appendix 4). The list of references should reflect the work with sources, materials of domestic and foreign science. The master's student is obliged to work with sources in foreign languages during the execution of the master's thesis. The list of references should contain at least 50 sources, of which at least 20% are sources in foreign languages over the past 5 years.

6.3 The Master's thesis should be completed by computer on one side of a sheet of A4 white paper with a single interval in TimesNewRoman font, size 14, with margins: left margin - 30 mm, right margin - 10 mm, top - 15 mm, bottom - 20. The volume of the master's thesis is by field:

- 7M01 – Pedagogical Sciences, 7M02 – Arts and Humanities, 7M03 – Social Sciences, Journalism and Information, 7M04 – Business and Management – at least 45 pages;
- 7M05 – Natural Sciences, mathematics and statistics, 7M06 – Information and communication technologies, 7M07 – processing and engineering industries – at least 35 pages.

The volume of the master's project for a specialized master's degree should be:

- 7M01 – Pedagogical Sciences, 7M02 – Arts and Humanities, 7M03 – Social Sciences, Journalism and Information, 7M04 – Business and Management – at least 40 pages;
- 7M05 – Natural Sciences, mathematics and statistics, 7M06 – Information and communication technologies, 7M07 – processing and engineering industries – at least 30 pages.

6.4 Dissertation section headings should be placed in the middle of the line without a dot at the end and printed in capital letters. Headings of subsections should begin with a paragraph indentation (starting with the 4th letter) and be capitalized, without underlining, without a dot at the end. The subsections are separated from each other by one interval.

6.5 The dissertation pages are numbered in Arabic numerals, the numbering is continuous, starting from the first title page, on which the number 1 is not affixed. The page number is placed at the bottom of the page in the center.

6.6 Illustrations (graphs, diagrams, photographs) are placed immediately after their mention in the text. The illustration is indicated by the word "Drawing" and its number, which is placed under the drawing after the explanations to it (Appendix 3). Each illustration should have a name, it is located under the picture. For example, "Figure 1. Types of sensors". If necessary, explanatory data is placed under the illustration. The numbering of illustrations (in Arabic numerals) is continuous throughout the dissertation. Links to each illustration are required in the text.

6.7 The digital material is presented in the form of tables, which are numbered in Arabic numerals. The word "Table 1" (or another one by number) is located above the table with paragraph indentation. This is followed by the name of the table (Appendix 3).

6.8 Formulas and equations are separated from the text in a separate line. There is at least one free line above and below the formula. Formulas and equations are numbered throughout the dissertation in Arabic numerals in parentheses.

6.9 References to the literary sources used are numbered in Arabic numerals in square brackets with an ordinal number.

7 THE PROCEDURE FOR SUBMITTING A MASTER'S THESIS FOR DEFENSE

7.1 The Master's thesis, designed in accordance with the established requirements, must be submitted to the graduating department to undergo the pre-defense procedure and receive a review from the supervisor indicating the reasoned conclusion "admitted to defense" or "not admitted to defense".

7.2 Requirements for the supervisor's conclusion:

- compliance of the dissertation with educational programs and branches of science;
- characteristics of the relevance of the work;
- characterization of the completeness, depth and originality of the solution of the questions posed;
- assessment of job readiness for protection.

7.3 A Master's thesis must be checked for plagiarism without reference to the author and source by the expert commission or the National Research Center for the Verification of Master's theses for plagiarism.

7.4 The master's thesis is defended in the presence of:

- positive feedback from the supervisor;
- at least two publications or one publication in a publication included in the List of scientific publications recommended by the authorized body or one publication in a journal included in the scientific databases of Web of Science/Scopus;
- the decision of the graduating department on the recommendation for the defense (extract from the minutes of the department meeting);
- one review by a reviewer whose qualification (academic or academic degree) corresponds to the profile of the work being defended, which provides a comprehensive description of the dissertation and a reasoned conclusion on the possibility of awarding an academic master's degree in the relevant educational program.;
- certificates on the examination of the dissertation for borrowing in the licensing system. If the supervisor and/or the graduating department gives a negative conclusion "not allowed to defend" or "not recommended for defense", the graduate student does not defend the master's thesis.

7.5 The similarity index when checking master's theses for plagiarism through the Turnitin system should be no more than 25%. If the master's thesis does not comply with this requirement, the graduate student has the right to another re-examination after eliminating some borrowed material or including a link to the source of borrowing indicated during the examination.

If, after two inspections, the undergraduate is issued a certificate of exceeding the level of borrowing of the material without reference to the source, then the graduate student is not allowed to defend. The restoration of a master's student is possible only for the next academic year by mastering the credits of the final attestation on a fee basis.

7.6 The schedule for the defense of master's theses is approved in accordance with the academic calendar. At the same time, no more than 10 undergraduates are allowed to defend themselves per day.

The master's thesis is defended at an open meeting of the attestation commission with the participation of at least 2/3 of its members.

To defend the master's thesis, the graduate student makes a report to the chairman and members of the attestation commission for at least 20 minutes.

7.7 The thesis defense should be in the nature of a scientific discussion and take place in an environment of high demands, integrity and adherence to scientific ethics.

7.8 The Master's thesis should be evaluated by the commission taking into account the following criteria:

- the amount of work performed;
- independence of research;
- completeness of the literary image and modernity of the sources used;
- the possibility of applying the results obtained in scientific research, practical work or in the educational process;
- literacy and clarity of presentation of materials;
- the quality of the dissertation defense report (clarity, literacy, the ability to use professional terms, the quality of the demonstration material, etc.);
- the correctness and completeness of the answers to the questions asked during the defense and to the comments of the reviewer.

7.9 The results of the master's thesis defense are drawn up in a protocol, in accordance with Appendix 5, individually for each graduate student. The decision of the AK is formalized in a protocol in accordance with Appendix 6.

7.10 Based on the results of the final attestation, the rector's order is issued on the graduation of undergraduates on the day of completion of the defense of their master's theses who have completed their studies in the relevant postgraduate educational program and successfully passed the final attestation, with the award of the master's degree.

7.11 Upon completion of the work of the attestation commission, its chairman writes a report on the final attestation, which is discussed and approved at a meeting of the Academic Council of the University within one month.

7.12 The report on the results of the final certification of undergraduates includes tables and an explanatory note.

The table shows the indicators listed in appendix 7 of these regulations.

The explanatory note reflects:

- 1) the level of training of undergraduates in this educational program at a higher educational institution;
- 2) characteristics of students' knowledge revealed on the comprehensive exam;
- 3) analysis of the quality of undergraduates' training in this specialty;
- 4) shortcomings in the preparation of masters;
- 5) compliance of the topics of master's theses with the current state of science, technology, culture and production requirements;
- 6) the quality of Master's thesis completion;
- 7) compliance of the review of the supervisor, the review of the official reviewer with the level of protection of the master's thesis;
- 8) specific recommendations for further improvement of undergraduates' training.

7.13 The report of the Chairman of the AK is accompanied by a list of graduates who have completed master's degree programs, indicating the surname, first name, patronymic, specialty and diploma number, signed by the rector, submitted to the authorized body in the field of education within one month after the issuance of the relevant order, and also posted on the university's website.

7.14 After completion of the AC, all protocols are submitted to the university's archive for storage in accordance with the established procedure.

10 CHANGES AND ADDITIONS

10.1 These Regulations are approved by the Rector of the University on the basis of a decision of the Academic Council and come into force from the moment of its signing.

10.2 Amendments and additions to the Regulations are made in accordance with legislative acts, regulatory documents in the field of education and university regulations.

10.3 In the event of a change, all copies of the expired Regulations available at the University should be withdrawn and replaced with new ones.

AGREED:

Vice-Rector for Academic Affairs L.N.Myasnikova

Vice Rector for Science and Innovation R.A.Beknazarov

Appendix 1

"I claim"

Dean of the Faculty

_____ 2022 G.

Calendar schedule of work on the master's thesis of a master's degree student

(code, name of the OP)

(Full name of the graduate student)

on the topic: "_____ **"**

(topic name)

Year of study	Dissertation research section	date
1 year of study (2022-2023 academic year)	Collection and analysis of literature for writing a master's thesis	September-November
	Writing the introduction and section 1.	December-January
	Organization and start of the experiment, field research, collection of materials (depending on the educational program)	September-December
	Writing scientific articles (abstracts of conference reports)	March-May
	Speaking at scientific conferences	May
	Writing Section 2	April
	Conducting an experiment is the primary and more in-depth data processing	November-April
	End of the experiment	May
	Beginning of writing section 3	September
	Publication of scientific articles (abstracts)	October
	Speaking at scientific conferences	April
	Final data processing and in-depth analysis	January
	Registration of acts of implementation of scientific research results into practice	February
	The end of writing section 3.	March

2nd year of study (2023-2024 academic year)	Writing section 1 "Literary review"	March
	Formulation of conclusions	April
	Writing an introduction, conclusion (if necessary), a final version of practical recommendations, a table of contents, a list of abbreviations, and a list of references	April
	Preparation for preliminary defense	May
	Dissertation submission to the department and to the Department of Postgraduate Education	May
	Master's thesis defense	June

Scientific director _____ Full name.

signature

Master's student _____ Full name

signature

AKTOBE REGIONAL UNIVERSITY NAMED AFTER K. ZHUBANOV

Department of Physics

MASTER'S THESIS

Computer simulation of the behavior of charged particle beams in electromagnetic fields

Performer _____ Full name.

Scientific director _____ Full name.

Approved for protection

Head of the Department _____ Full name.

" _____ " _____ 2022 G.

Aktobe

2022

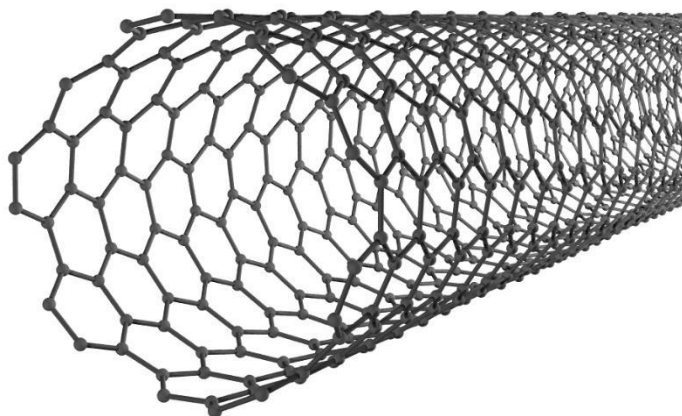


Figure 1. Carbon nanotube

Table 1. Distribution of test results

No • p / p	Testing	I Course				II course				III course			
		Great	Well	Satisfactory	Unsatisfactory	Great	Well	Satisfactory	Unsatisfactory	Great	Well	Satisfactory	Unsatisfactory
1	Power abilities	3,2	12,1	36,3	48,4	3,1	10,7	27,4	58,8	2,1	11,0	26,4	60,5
2	Overall endurance	6,6	14,2	29,5	49,7	6,3	12,9	26,9	53,9	6,3	12,9	24,4	56,4
3	Flexibility	55,8	14,5	15,2	14,5	60,0	15,6	16,0	8,4	60,4	15,9	16,1	7,6
4	Dexterity	26,1	31,4	40,7	1,8	26,1	30,2	41,1	2,6	26,0	30,9	40,4	2,7
5	Speed	14,0	16,4	47,8	21,8	15,4	16,7	49,2	18,7	14,5	13,5	53,1	18,9

Regulatory documents

Title of the official document (law, resolution, decree, etc.): information related to the title, date of adoption of the document

examples:

The state mandatory standard of education. Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 604 (with amendments and additions dated 07/20/2022. Order No. 2 of the Ministry of Science and Higher Education of the Republic of Kazakhstan (hereinafter referred to as the Ministry of Education and Science of the Republic of Kazakhstan))

Patents are

examples:

Pat. 33327. The Republic of Kazakhstan. A method for enhancing the luminescence of KCl by activating it with light Na cations/ Shunkeev K.Sh.; applicant and patent holder of ARGU named after K.Zhubanov. - 11/30/2018. – 4 p.

Books are

examples:

Sarmurzina G.A. Modern history of Kazakhstan. Almaty: KazNITU, 2016. 123 p.

Abstract of the dissertation

Author. title: information related to the title (see on the title): the code of the nomenclature of the specialties of researchers: date of protection: date of approval / information on responsibility (team). – Place of writing. - The volume.

examples:

Abiev S.A. Rust fungi of cereal plants of Kazakhstan: 03.00.00: 30.10. 1994.– Almaty, 1994. – 30 p.

An article from the magazine

Author. title of the article: information related to the title / information about responsibility (authors of the article) // Title of the journal. – Year of graduation. – Date and month of release. – The location of the article (page).

examples:

Rakhimova E.V., Nam G.A., Ermekova B.D., Abiev S.A. A brief illustrated determinant of rust fungi in Kazakhstan // International Journal of Experimental Education. – 2016. – №10(1). – Pp. 85-86.

An article from the newspaper

Author. Article title: information related to the title / information about responsibility (authors of the article) // Newspaper name. – Year of graduation. – Date and month of release. – The location of the article (page).

examples:

Alzhanova A. December 1 is the Day of the First President of the Republic of Kazakhstan / A. Alzhanova // Kazakhstanskaya pravda. – 2017. - No. 143. – p. 9.

PROTOCOL № _____

Meeting of the Attestation Commission

" ____ " _____ 20__ G. from ____ hour. ____ min. up to ____ hour. ____ min.

On reviewing the master's thesis of a graduate student _____

(last name, first name, patronymic, specialty)

on the topic: _____

Were present:

Chairman

(last name, first name, patronymic)

Members:

(last name, first name, patronymic)

(last name, first name, patronymic)

(last name, first name, patronymic)

(last name, first name, patronymic)

The master's thesis was completed under scientific supervision _____

(last name, first name, patronymic, academic or academic degree)

The reviewer _____

(last name, first name, patronymic, academic or academic degree, place of work, position held)

The following materials have been submitted to the Attestation Commission:

1) Master's thesis on _____ pages;

2) drawings, tables for the master's thesis on _____ sheets;

3) review of the supervisor of the master's thesis with the conclusion

_____;

(specify "allowed for protection")

4) the decision of the graduating department on _____

(specify the name of the department and

_____;

is the dissertation recommended or not recommended for public defense?)

5) a review of the master's thesis with an assessment _____

_____;

(the reviewer's assessment is indicated)

After the announcement of the completed master's thesis, the
following questions were asked to the graduate student within _____ minutes:

1. _____

(surname and initials of the commission member and the question asked)

2. _____

(surname, initials of the commission member and the question asked)

3. _____

(surname, initials of the commission member and the question asked)

4. _____

(surname, initials of the commission member and the question asked)

5. _____

(surname, initials of the commission member and the question asked)

General characteristics of the undergraduate student's answers to the questions asked to him _____

During the defense of the master's thesis, the graduate student showed _____

(what is the level of knowledge on general theoretical and special training)

To recognize that the master's student has completed and defended his master's thesis
with an assessment _____

(assessment according to the point-rating letter system of knowledge assessment)

Dissenting opinions of the commission members _____

Chairman _____ (*signature*)

Members of the Commission _____ (*signature*)

_____ (*signature*)

Secretary _____ (*signature*)

PROTOCOL № _____

of the decision of the State Attestation Commission

" ____ " _____ 20 ____ G. from ____ hour. ____ min. up to ____ hour. ____ min.

about the award of the Master's degree

Were present:

Chairman

(last name, first name, patronymic)

Members:

(last name, first name, patronymic)

(last name, first name, patronymic)

(last name, first name, patronymic)

(last name, first name, patronymic)

Master's student _____

(last name, first name, patronymic, specialty)

Defended his master's thesis with an assessment:

(master's thesis, assessment according to the point-rating letter system of knowledge assessment, date of completion)

To recognize that the graduate student has defended his master's thesis.

Assign to a master's student _____

(last name, initials)

Master's degree in the educational program

(specialty code and name)

Dissenting opinions of the commission members

To issue a diploma of postgraduate education.

Chairman _____ *(signature)*

Members of the Commission _____ *(signature)*

_____ *(signature)*

Secretary _____ *(signature)*

Table 1

Results of the Master's thesis defense**for _____ year****educational program _____**

Final assessment form	Number of people admitted to the final certification	Number of takers	Some of them passed on:							
			90- 100%	70- 90%	50- 70%	Less than 50%	Average score	No-show	% characteristics	% academic performance
Thesis defense										

Table 2

Comparative analysis of the issue

Indicators	Previous period	Reporting period
% of quality		
% of academic performance		
Average score		