

**REPUBLIC OF UZBEKISTAN**  
**MINISTRY OF HIGHER AND SECONDARY SPECIAL**  
**EDUCATION**

**SAMARKAND STATE UNIVERSITY**  
**DEPARTMENT OF MAGISTRACY**

**SCIENTIFIC AND PEDAGOGICAL WORK OF**  
**MASTER STUDENTS, PREPARATION OF SCIENTIFIC**  
**RESEARCH AND MASTER'S THESIS,**  
**SCIENTIFIC SEMINA PROGRAM**  
**AND EVALUATION CRITERIA**

**FOR THE 2021/2022 ACADEMIC YEAR**

**SAMARKAND – 2021**

**REPUBLIC OF UZBEKISTAN**  
**MINISTRY OF HIGHER AND SECONDARY SPECIAL EDUCATION**

**SAMARKAND STATE UNIVERSITY**  
**DEPARTMENT OF MAGISTRACY**

**«Confirm»**

**Vice Rector for Academic Affairs**

**prof.A.S.Soleev**\_\_\_\_\_

\_\_\_\_\_ **2021**year

**SCIENTIFIC AND PEDAGOGICAL WORK OF**  
**MASTER STUDENTS, PREPARATION OF SCIENTIFIC RESEARCH AND**  
**MASTER'S THESIS,**  
**SCIENTIFIC SEMINA PROGRAM**  
**AND EVALUATION CRITERIA**

**FOR THE 2021/2022 ACADEMIC YEAR**

**SAMARKAND – 2021**

In this program covers the scientific-pedagogical and scientific-research activities, the content of the scientific seminar, the procedure for conducting and the system of their assessment, which are held in the existing 1st and 2nd level master's specialties at Samarkand State University.

**Developer:**

N.N.Nizamova- Head of Master's degree Courses

**Reviewers:**

X.X.Ruzimuradov – “The Department of Algebra and geometry is a candidate of physical and Mathematical Sciences, Associate Professor.

Eshburiyev R.- Head of the Department of nuclear physics and astronomy, candidate of physical and Mathematical Sciences, Associate Professor

This program was considered and approved at the meeting of the educational and methodological Council of SamSU No. 1 held on September 29, 2021.

## **INTRODUCTION**

The program covers the issues related to the scientific-pedagogical and research activities of the master's students, the content of the scientific seminar, the procedure for conducting and the system of their assessment. This program is aimed at master's students studying at Samarkand State University and their research and master's thesis, scientific pedagogical work, professors and teachers leading the scientific seminar, heads of the specialist training department.

Program of implementation of scientific-pedagogical and research activities of master's students at Samarkand State University laws of the Republic of Uzbekistan "on Education" and "on the National Program of Personnel training ", decree of the president of the Republic of Uzbekistan "on further improvement of the system of training and certification of highly qualified scientific and scientific-pedagogical personnel" dated July 24, 2012 No PF-4456., on measures to increase its effectiveness " September 10, 2007 190- decree of the president of the Republic of Uzbekistan dated April 20, 2017 “on measures for the further development of the higher education system” and the regulations on the magistracy approved by the decision of the Cabinet of Ministers dated March 2, 2015 No. 36, Approved by the order of the minister of higher and secondary special education of the Republic of Uzbekistan dated August 9, 2018 No. 19-2018 “on the system of control and assessment of students’ knowledge in higher educational institutions” and establishes the procedure and criteria for assessing the work carried out on Statute “ on the procedure and evaluation criteria for monitoring student knowledge at Samarkand State University”, approved by the statement No. 2 dated September 29, 2021.

### **1. SCIENTIFIC AND PEDAGOGICAL ACTIVITY**

#### **1.1. The content of scientific pedagogical activity**

Scientific and pedagogical activity is an important component of the educational process of the magistracy, the introduction into direct practice of the scientific and theoretical knowledge acquired by master’s students, who are preparing as a professor - teacher of a higher educational institution, the organization of classes on the basis of innovative pedagogical and information - communication technologies, the development of international standards and advanced foreign, practical acquaintance with the types of activities to ensure the quality of education in a higher educational institution and determines the purpose of scientific and pedagogical work.

The purpose of the implementation of scientific pedagogical work - during the period of scientific and pedagogical practice, master's students study the content, regulatory framework and procedure for conducting scientific and pedagogical activities in a higher educational institution and conduct pedagogical experience-testing work within the framework of their scientific research on the topic of a master's thesis, and process the results obtained with the help of mathematical-statistical methods, form conclusion.

## **1.2. Tasks performed by a master's student during scientific-pedagogical activity**

During the implementation of scientific - pedagogical work, it is necessary for the master's student to work in cooperation with the scientific and pedagogical leader in order to acquire scientific and pedagogical skills in the direction of his bachelor's degree education. It is also necessary for a master's student should have an initial idea and understanding of his specialty, to have professional skills on the basis of new requirements for the chosen specialty, concepts about the organization and conduct of the educational system and process. The purpose of the master's student acquaintance with modern scientific and pedagogical requirements is to prepare him, as a future specialist to provide students with practical knowledge in the subjects of the department. The goal of the master's student to familiarize himself with modern scientific and pedagogical requirements is to prepare him as a specialist in the future to provide students with practical knowledge in the department's subjects.

Based on the purpose of scientific - pedagogical work, the master is required to perform the following tasks:

- participation of leading professor-teachers of the department in training sessions (by decision of the department and scientific leader);
- conduct classes in academic groups with the participation of teachers of a scientific leader or leading professor;
- study and work on distance learning platforms and systems;
- development of pedagogical technologies in the established educational science, participation in the preparation of educational methodological complexes;
- conducting educational, independent work and educational work with bachelor students;
- possession of theoretical knowledge in order to improve pedagogical skills;

- to increase interest in the pedagogical profession, to learn scientific concepts characteristic of the pedagogical profession and to acquire skills in the formation of ideas of pedagogical research;
- advanced training in various training in specialized disciplines;
- study and application of new pedagogical and information technologies, drawing up a plan for conducting lectures and classes on their basis;
- to study the organizational and educational methodological support of Independent Education of students, to develop methodological guidelines for obtaining independent knowledge;
- learning to carry out educational work, and organization;
- it is necessary to study the methods of preparing lecture notes and methodological manuals for practical training, to learn how to draw up plans for a working program and calendar, and so on.

### **Master's student on the results of scientific and pedagogical activities:**

- practical development of innovative pedagogical and information and communication technologies, methods of activation of the educational and educational process, international standards and advanced techniques for assessing students' knowledge, skills and competencies;
- organizational and educational and methodological support of independent education, distance learning technologies;
- knowledge and use of the basics of development of educational-normative documents (curriculum, working curriculum, science program, working Science Program, educational-methodical complex, calendar work plan) in subjects, creation of educational literature (textbook and instruction manual, methodical instruction);
- drawing up plans (technological maps) for conducting traditional and non-traditional (innovative) forms of classes in higher educational institutions (lecture, practical, laboratory, seminar), conducting lecture texts and classes;
- development of organizational and methodological support for the control of knowledge, skills and abilities, competencies of students;
- Must have experience in creating organizational and methodological support for spiritual and educational work in a higher educational institution.
- Scientific-pedagogical work is usually carried out at the specialist training departments of the higher educational institution. It is also envisaged that master's students, during the period of scientific and pedagogical work, carry out pedagogical experience-test work within the framework of the topic of their master's thesis and, based on the results obtained, enrich master's dissertations

in content. During the conduct of scientific pedagogical work, a number of tasks are assigned to master's students and their scientific pedagogical work is directly supervised and evaluated by the heads of departments and departments.

- The order of the master's work, events, lectures, practical classes and independent work carried out by the department, in which subject, in what subjects the head of the department and scientific it is determined by the head of pedagogical work. The master's personal calendar work plan is supplemented by the types of work performed in the table" scientific - pedagogical work plan", allocated hours, planned deadlines and approved by the decision of the department.
- By the decision of the department, it is possible to replace the works of the model plan with those that are necessary for the department and are not listed in the plan, based on the nature of the specialty. This should of course be reflected in the clarified calendar work plan.
- Every month, the master's student gives a report of the work done according to the plan at the meeting of the department. The meeting of the department on the report makes a decision on the content of "the plan has been fulfilled" or "the plan has not been fulfilled" by the master.
- At the end of the semester, the master's student prepares and submits to the department a report on the final scientific and pedagogical work for the semester on the basis of monthly reports. The head of the department, the head of the scientific pedagogical work and members of the department formalize the assessment of the master in the scientific and pedagogical work account, taking into account the decision of the department and the recommendation of the head of the scientific pedagogical work on the report of the master. An unsatisfactory assessed master's student is considered academic debtors.

## **2. SCIENTIFIC-RESEARCH ACTIVITY**

### **2.1. Goals and objectives of the scientific research work**

The main goal of the scientific research work (ITI) is to analyze the modern state of scientific and practical problems on the topic of a master's thesis by undergraduates.

The main goal of the research work will be the preparation of the master's thesis, which is considered the result of the master's scientific activity, devoted to priority and topical issues in the fields of science and education, technology and technology, economics, aimed at finding a scientifically based solution to a

particular task, developing recommendations, analyzing the results based on statistical methods.

Each student is presented with topics from the base created at the department of specialty. Accordingly, each student chooses the topic of his master's thesis on the basis of the bank of existing topics at the department and in agreement with the scientific head on the recommendation of the Department.

Research work can be carried out on the basis of educational and research institutions, in research institutes of UzFA, in advanced production enterprises, these institutions are considered as a research site in the preparation of masters in specialties. Research work of undergraduate students in research units of Higher Educational Institution, research laboratories, Academy and network research institutes, enterprises and organizations, secondary schools, special schools, boarding schools, lyceums, colleges can be transferred to the base. Scientific research work can also be carried out in educational institutions, scientific centers, enterprises and organizations of foreign countries, formalized in the appropriate order.

The research work provides for the constant activity of students in libraries in order to collect materials on the topic of the master's thesis and draw up a bibliography.

Research work: the study of sample models, object and process research methods in the specialty of a master's degree; the study of the scientific technical support of experimental research; conducting experiments, research; the processing of experimental research results, analysis, development of conclusions and recommendations is the same.

According to the current regulation” on magistracy”, research work consists of two stages, namely: research work, preparation of a master's thesis and internship.

Master's thesis on the priority directions of reforms carried out in the education system within the framework of the priority directions of the development of Science and technology of the Republic, including the decree of the president of the Republic of Uzbekistan dated February 7, 2017 No. 4947 of the PF “on the strategy of actions for the further development of the Republic, The resolution of PP 3775 “on additional measures to improve the quality of education in higher educational institutions and ensure their active participation in comprehensive reforms carried out in the country” dated June 5, 2018 should be aimed at the implementation of the tasks set out in other regulatory legal acts related to this activity.



The topic of the master's thesis is selected independently by the master's student from the bank of recommended topics in each specialty. Choosing a topic is considered one of the very responsible tasks. The master's degree is advised by the leading professors and teachers of the department.

It is desirable that the subject is determined by the master's degree in the main specialty. The practical experience of a master's student, knowledge of problems, the ability to collect, process and analyze information in pedagogical processes, knowledge of a foreign language, and the provision of advanced experience in the foreign and Republican education systems are of great importance.

The correct selection of the topic of the dissertation ensures its successful completion. The attachment of a scientific supervisor to a master's degree is also carried out in the process of choosing a topic.

If several candidates for scientific guidance are nominated for the proposed topic, the master student will be able to independently choose not only the topic, but also the scientific supervisor. When creating a Bank of topics of Master's dissertations, scientific employees of research institutes, professors and teachers of other higher educational institutions may be involved in the creation of a cooperation agreement with the department of specialty. When the topic is selected, it is discussed at the board of the department and faculty and recommended for approval to the University Council. Then the graduate student, together with the head of the scientific research work, should draw up a personal work plan for two years of scientific activity and operate on this basis.

At the end of the semester, until the start of the final control session, The Master will bring a folder of documents (a list of scientific literature used, a list of internet addresses, developed algorithms, methods, software solutions, the results of Experimental Research, a printed version of the planned chapter of the dissertation, statements, conclusions, reviews) prepares and submits to the department along with the final research work and the report of the work carried out on the preparation of the master's thesis. During the final control session, the Department on the final report of the magistrate draws up the assessment of the magistrate on the account of the preparation of the research work and the master's thesis, taking into account the decision of the department and the recommendation of the scientific supervisor.

An unsatisfactory assessed master's student is considered academic debtors. The personal calendar will provide a report corrected within the established deadlines, re-fulfilling the relevant clauses of the work plan. This report is also

reviewed and evaluated again by the above working group. The assessment is drawn up on the second account, the research work of master's student, which is also assessed unsatisfactory in the second, is considered with the participation of a special commission formed by the head of the department and the corresponding conclusions are made.

## **2.2. The content of research activities**

### **Stage I of scientific activity (1st semester)**

At the 1st stage of scientific activity, the student substantiates the relevance of the topic of the master's thesis, determines the purpose and objectives of the study, the subject and objects of research, analyzes foreign and Republican scientific and methodological literature, collects data in order to determine the degree of study of the topic. Master's thesis based on sufficiently collected materials it is obliged to formalize the part of the literature analysis of his work at the I stage of activity.

The results of the student's work on the first stage of scientific activity will be discussed at the meeting of the department every month during the 1st semester. According to the decision of the meeting of the department, at the end of the semester, a report of each graduate student on all the work done with the participation of the scientific head of the student, the head of the Department on the results of the I stage of scientific activity is heard and transferred to the attestation. The student must fully formalize the part of the analysis of the literature of the dissertation work and submit the initial materials to the attestation board.

The literature review of the dissertation, the part of the problem devoted to the state of study (which can consist of two to three parts), is recommended to be around 15-20 pages.

At the I stage of scientific activity, the student is recommended to pay special attention to the following: conducting scientific research, studying general methods and ways to identify and solve professional problems; processing and summarizing information received during scientific activity; substantiating the relevance of the chosen topic; forming scientific-theoretical, scientific-methodological and psychological - pedagogical requirements, considering methods for solving the issue.

Undergraduates of the first stage, during the planned research work in the 1st semester, can choose the topic of the master's thesis, determine the scientific

supervisor, determine the purpose of the scientific research, determine the research tasks, together with the scientific supervisor, develop a master's dissertation plan, determine the subject and object of research, it is necessary to collect information on the topic from libraries and the internet and prepare a written report on the work done.

The first stage is for undergraduate students to substantiate the relevance of the topic of the master's thesis during the research work scheduled for the 1st semester, determine the goals and objectives of the dissertation, the subject of research, object, practical significance, scientific novelty, determine the level of work of the selected topic, it is necessary to prepare the necessary materials for conducting experimental and test work and be able to defend the plan drawn up at the meeting of the department, substantiating the relevance of the chosen topic.

## **2.2. II stage of scientific activity (2nd semester)**

The main result of scientific activity for a graduate student is a master's thesis, which must fully meet all the requirements established by the Statute in relation to a master's thesis.

The student's work on scientific activity is discussed at the meeting of the department every month during the 2nd semester. According to the decision of the meeting of the department, at the end of the semester, the report of each graduate student on the results of his scientific activities and on the work done will be heard.

Masters of the first stage work on the universal part of the dissertation topic during the research work planned for the 2nd semester analyze literature, normative documents, scientific articles, and statistical data on the topic, describe their approach to the scientific ideas and concepts presented in them. Experience-when drawing up a program of test work, when choosing research methods, provides information on the object, describes the selected, developed research methods. Didactic materials, algorithms, methods, software tools, equipment, visual materials used to conduct experimental – test work are explained. Methods are given that are used to analyze the results of experimental-test work, to summarize, summarize the materials, statistical data and indicators collected in the processing. Experience-the results of test work are analyzed, processed. With the help of a scientific supervisor on the topic of a master's thesis, an article is prepared for a scientific journal. Based on the topic of the dissertation, The Master will analyze the necessary literature and prepare an annotation for at least five of them. In the annotation, a brief summary of the analyzed monograph, dissertation, textbook or educational and methodological

manual, the degree of solution of the problem raised by the dissertation, its achievements and shortcomings are revealed.

In the first course, monitoring of the activities of the undergraduates is carried out on the basis of the following indicators: The timely implementation of the master's calendar work plan within the deadlines; the publication of one scientific report or one thesis at a scientific conference of a Republican or international level; participation in scientific seminars; the degree of mastery of educational disciplines in the specialty.

#### **2.4. III stage of scientific activity (3rd semester)**

At the III stage of scientific activity, the master is explained that experiments, tests, observation work, other types of research were carried out according to a specific plan in a standard or non-standard way on the basis of the originally established program. The processing of preliminary results is recommended to be carried out on a computer, observing the rules of Mathematical Statistics in standard or non-standard methods.

The degree of reliability of the results obtained is guaranteed by the criteria of Mathematical Statistics. The patterns of connection between factors and results are determined using classical methods or computer programs, and the experimental (experimental) results are compared and analyzed by theoretical regularities. On their basis, conclusions are drawn on the studied object, process, product quality, methodologies. The results are drawn up in the form of graphs and tables, observing the requirements and rules of state standards.

In the chapter of the dissertation work on the results obtained and their discussion at the III stage of scientific activity, the master's student performs such tasks as: analysis of research results; interpretation of research processes; proposal of an experimental device, technological schemes.

The work carried out at the III stage of the student's scientific activity is discussed at the meeting of the department every month during the semester. According to the decision of the meeting of the department, all undergraduates at the end of the semester, on the results of the III stage of scientific activity, a public report with the participation of the student, his scientific head (consultant), the head of the department is heard and attested.

#### **2.5. Stage IV of scientific activity (4th semester)**

At the IV stage of scientific activity, the master's student completes the dissertation and formalizes it at the established level of demand.

At the IV stage of scientific activity, the master's student will fully revise the dissertation based on the study of materials related to the topic, the results obtained and the practical skills gained.

A graduate who does not submit a report of scientific activity in writing is not included in the initial protection and, according to the established procedure, is an academic debtor.

In the second year, the activities of the undergraduates are monitored on the basis of the following criteria:

timely implementation of the calendar work plan within the established deadlines;

the publication of two scientific summaries or two theses at a national or international scientific conference;

the fact that the master's thesis has passed the initial defense, if it is planned during the monitoring period;

participation in scientific seminars;

the level of mastery of all academic disciplines in the specialty.

The student's scientific activity will be discussed at the meeting of the department every month during the semester on the work done at the IV stage. According to the decision of the meeting of the department, each graduate student at the end of the semester, on the results of the IV stage of scientific activity, a report on the work done by the Graduate Department with the participation of the student, his scientific head (consultant), the head of the department is heard and certified.

### **III. PREPARATION OF A MASTER'S THESIS**

#### **3.1. Control over the implementation of the master's thesis**

Control over the preparation of the master's thesis is entrusted to the scientific supervisor, the head of the department and the head of the master's department.

The scientific head of the dissertation regularly monitors the timely and high-quality implementation of the personal plan after the approval of the Master's personal work plan in the established order. He regularly gives advice to the undergraduates on scientific literature, internet information, materials of conferences,

where it is necessary to focus on their use, which is necessary to cover the topic of the dissertation. Consider the reports, articles, conference materials prepared by the graduate student on the scientific research on the dissertation. Edits them as needed. Supervises the writing of the dissertation in stages at a qualitative and in-demand level, as well as within the deadlines. Presents the scientific research of the master's degree on the dissertation, ready-made parts of the dissertation for discussion at the meetings of the department.

After the dissertation is ready, prepares a conclusion for it. In conclusion:

- relevance of the dissertation topic;
- the relationship of the subject with the specialty;
- justification of research innovation;
- the ability of a master's student to conduct scientific work;
- analysis and generalization of materials in the dissertation and the accuracy of the conclusions drawn on them;
- analysis and generalization of materials in the dissertation and the accuracy of the conclusions drawn on them;

In the conclusion on the dissertation written by the scientific supervisor, the relevance, scientific novelty, scientific and practical, positive aspects of the work are thoroughly analyzed on the basis of concrete evidence, and the completion of the dissertation is indicated and evaluated.

The conclusion of the scientific supervisor on the completion of the dissertation is signed by the scientific supervisor and certified by the seal of the Universities, Network institutes or customer organizations in which he works.

The responsibilities of a scientific supervisor include:

- drawing up a table of consultations with the aim of systematically helping with possible issues within the framework of the research topic;
- participation in the selection of research methods and assistance to the undergraduates in their application in the research work;
- control over the implementation of work on the established calendar work plan of the master's thesis and the timely preparation of the master's thesis;
- to give a conclusion to the master's thesis until the initial defense.

The head of the Department discusses the scientific research of the master's student on the dissertation, ready-made chapters of the dissertation (theoretical and experimental parts, conclusions and proposals) at the meetings of the department, ensures their preparation at the required level, gives relevant instructions to undergraduates and their scientific leaders. Together with the general activities of his undergraduates, he discusses his work on the preparation of the master's thesis at the meetings of the department at least once every half a year. He reports to the department at the end of each semester on the work of his undergraduates on the preparation of the dissertation.

The head of the magistracy Department supervises the implementation of the work planned by the scientific head, the head of the department and the magistrate on the basis of the requirements of the regulations, reports at the Academic Council of the University at the specified times.

With the participation of the scientific supervisor, the master reports on the state of completion of the master's thesis, the preparation of scientific, methodological articles, the examination of creative works carried out at the monthly meetings of the department, and at the end of the semesters, the department provides a written report.

The undergraduates can make a proposal to change the topic of the master's thesis and the scientific supervisor based on it.

**Requirements for a review for a master's thesis.** The review, written by the reviewer on the dissertation, should be thoroughly analyzed on the basis of objective, clear evidence of the relevance, scientific novelty, scientific and practical, positive, controversial aspects of the work, and the completion of the dissertation, and should be evaluated.

The review must be submitted at least 3 days before the initial protection. In case of detection by the master of cases of violation of the rules of professional etiquette (plagiarism, falsification of information, citing false quotes, etc.), they should be indicated in the review.

In cases where the master's thesis does not comply with the established requirements, in case of detection of violations by the undergraduates of the rules of professional etiquette (plagiarism, falsification of information, false citation, etc.), also in the absence of the possibility of correcting these cases in the short term, the reviewer gives a conclusion that it is not advisable to put a master's thesis on defense.

The dissertation review is signed by the reviewer and certified by the seal of the Universities, Network institutions or customer organizations in which he works.

### **3.2. The structure of the master's thesis and the requirements for its content**

A master's thesis should consist of the following components:

title sheet;

master's thesis in two languages (teaching language and English) brief annotation;

contents;

introduction;

main part;

conclusion;

list of publications;

applications (if available).

The introduction should briefly include: justification of the topic of the master's thesis and its relevance; object and subject of research; purpose and objectives of the study; scientific novelty; main issues and hypotheses of the study; review (analysis) of literature on the subject of research; description of the methodology used in the study; theoretical and practical significance of the research results; description of the work structure.

The main part of the master's thesis consists of at least three chapters, the chapters should be mutually proportional in volume and include:

description of the research methodology and the practical part of the work;

statement of the main results of the study with the indication of the personal contribution of the master's student in solving the issue in which the study was carried out.

In the summary section of the master's thesis, the scientific and practical significance of the results recorded in all chapters is covered, as well as conclusions on the solution of the problem of scientific research. The summary part should not exceed 4 pages. Each chapter of the dissertation will be completed with separate conclusions and proposals, but its main ones will be concentrated in the general "conclusion" section of the work. In the summary section of the dissertation work, the



conclusions and specific proposals drawn as a result of the research are embodied, including the results that the master personally achieved during the period of the dissertation work. In this case, the dissertation work "received scientific innovations and achievements based on the chapter" results and their discussion "should be clearly and clearly covered. Materials containing additional information that are directly necessary to describe its content can be attached to the master's thesis. The volume of the application part should not exceed one third of the total volume of the master's thesis. In the appendix to the dissertation work, the initial, initial data of the research work performed by the master's student, a visual drawing, scheme, table and drawings necessary for certain parts of the dissertation work are presented. The master working on the master's thesis must comply with the rules of professional etiquette (plagiarism, falsification of information, as well as not allowing to cite false quotes).

The text of the dissertation is written on a standard sheet, in which the following rules must be observed: the text of the dissertation should be written in the text editor of Microsoft Word in Times New Roman, 14 fonts; row spacing — 1.5 cm; upper and lower border 2 cm, row head: 3 cm on the left side, 2 cm on the right side; The layout number of the page is placed in the center of the bottom of the page.

The volume of the master's thesis is recommended to be 70 — 80 pages, in addition to the title sheet, table of contents, list of literature and applications.

A master's thesis is prepared in the language in which the master is trained (in a foreign language, in accordance with the recommendation of the department or the Department of the magistracy). An annotation written in the state language is attached to a master's thesis prepared in a foreign language. The initial and official defense of such master's dissertations is carried out by translation.

The content and volume of the components of the master's thesis, taking into account the nature of the master's specialty, can be changed and increased by the decision of the educational and methodological Council of the faculty.

### **3.3. The procedure for conducting preliminary defense of the master's dissertation**

The initial defense of the master's thesis is organized in the commission created by the department with the participation of the scientific supervisor (scientific consultant). Specialists from other departments, as well as from other organizations, can be invited to the initial defense.

Until the initial defense, the master must have a review of the scientific supervisor, as well as at least 2 scientific articles or theses on the topic of the dissertation. It is also required to obtain a conclusion to the master's thesis until the preliminary defense with the appointment of a scientific consultant.

The master's thesis must be formalized in the manner prescribed by the Statute.

The head of the department is responsible for the organization and conduct of preliminary protection. The undergraduates are assigned up to 15 minutes for lectures and up to 10 minutes for questions and answers. The master's student submit the following information:

- 1) Master's thesis
- 2) conclusion of the scientific supervisor;
- 3) presentation of the initial defense;
- 4) at least 2(two) articles or theses in which information on the topic of the master's thesis is covered.

The master must comply with these requirements, be personally responsible for the performance of work in full in accordance with the given assignment.

In the initial defense, internal and external reviewers are assigned to the master's thesis and drawn up by the decision of the Department. Reviewers can be specialists in the field of a scientific degree or scientific title, employees of a scientific institution, professors and teachers of other higher educational institutions.

Preliminary defense results the minutes of the meeting of the department are drawn up with a conclusion in the style of" recommended for official protection "or" not recommended for official protection. Preliminary defense conclusions are submitted to the magistracy department at least 1 week before the official defense.

The head of the magistracy department introduces the dissertation work to the state Attestation Commission for official protection by the decision of the department, approved reviews of the scientific leader and reviewers.

### **3.4 The procedure for conducting the defense of the master's dissertation and the evaluation criterion**

The day of the official defense of the master's thesis is determined on the basis of a schedule approved by order of the rector (director)of a higher educational institution.

The official defense of the master's thesis is held by the state final certification Commission of the higher educational institution.

The master's dissertation, which has passed the initial defense at the department, is submitted to the secretary of the final state attestation of the faculty together with the conclusion of the scientific supervisor, the review of internal and external reviewers, the minutes of the meeting of the Department. The secretary of the final state attestation of the faculty submits to the state Attestation Commission for protection by order of the rector of the University on the conclusion of the scientific leader, review of internal and external reviewer, decision of the department and inclusion of master's student in defense.

The defense of the dissertation work is characterized by a scientific discussion and is openly conducted on the basis of scientific communication with extreme exactingness and perseverance. In this case, all scientific, theoretical and practical conclusions and recommendations and proposals in the master's thesis are comprehensively substantiated, reliability is analyzed.

After the chairman of the secretary of the final state attestation announced the defense of the dissertation, the secretary of the final state attestation stated that the subject of the dissertation work, the name of the master, as well as the availability of relevant documents and the implementation of the master's ("educational and scientific activities", "biography"), the training plan, provides brief information about the published scientific and methodological articles and other information.

The word for the statement of the dissertation work is given to the magistrate himself. He briefly talked about the goals and objectives of the dissertation, the relevance of the work, the results of research work carried out for two years, practical significance, and general conclusions. The master is recommended to use tables, graphs, schemes and computer tools during the defense of the dissertation. The time for describing the master with the materials of the presentation should not exceed 20 minutes.

After that, members of the Secretary of the final State attestation and other listeners will participate in the discussion and scientific discussion on the dissertation. The secretary of the final state attestation, some of whom are involved in the dissertation, can determine the results of the research process and the scientific and practical work performed by verbally asking relevant questions on research methods. The questions to be asked should relate to the essence of the issue posed before the dissertation.

After the master's report, the presiding officer gives the word to the official reviewer of the dissertation (in cases where the reviewer did not participate for good reason, the secretary of the final State attestation will read and hear the conclusion of the reviewer.). The word is again given to the magistrate to express his attitude to the shortcomings, suggestions, comments indicated in the review.

A word is given to the scientific head of the magistrate. In his speech, the scientific leader expresses his attitude to the dissertation work performed by the master, the research work carried out and the activities of independent research. In cases where the scientific head of the magistrate could not participate in the meeting of the state Attestation Commission, the presiding officer will read and hear his written conclusion on the dissertation.

At a meeting of members of the Secretary of the final State attestation, protection is considered and the dissertation work is evaluated.

The master's thesis is approved by the regulation of the Cabinet of Ministers of the Republic of Uzbekistan on March 2, 2015 "the right of the Magistracy" and by the order of the Ministry of Higher and secondary special education of the Republic of Uzbekistan dated August 9, 2018 No. 19-2018 "on the system of control and assessment of students' it is evaluated on the basis of the instruction "on the procedure for monitoring and evaluation criteria of students' knowledge at Samarkand State University", approved by the council's Protocol No. 2 of September 29, 2021.

The fact that the assessment of the master's thesis substantiates the relevance of the topic chosen for the master's thesis; the consideration of the methods of solving the issue posed and the most effective of them are determined; the degree of the master's degree in scientific (or scientific-technical, scientific-creative) research, the fact that he was able to select problems specific to the topic and analyze them on the basis of concrete evidence; the fact that he was able to embody the data and results obtained in the study in the form of images (drawing, drawing, presentation); the fact that he substantiated an effective alternative solution scientifically, constructively, technologically and feasibility; the results of the solution of the scientific and technical issue include the formation of conclusions and proposals, and the determination of the possibilities of application in the relevant branches of Science and economics, and other issues.

Members of the commission evaluate the magistrate on the basis of the following criteria:

the master's thesis is able to show the relevance of the research topic and its connection with practice;

independent approach of a graduate student to research and solving tasks;

completeness and depth of critical analysis of used scientific literature, scientific publications, regulatory legal acts, statistical data, as well as literature in foreign languages;

the substantiation of the fact that research methods are used in practice;

the practical significance of the recommendations developed on the basis of the results obtained;

the ability of a graduate student to see the prospects for the development of research and results obtained within the framework of a master's thesis;

qualification to be able to observe the mutual logical relationship in the theoretical and practical parts of the master's thesis.

The defense of the master's dissertation is evaluated in a 5-grade system:

Grade” 5 (“excellent”) - The Master has sufficient theoretical and practical knowledge in his specialty; will be able to show the relevance of the research topic and its connection with practice; fully understands its essence; adheres to a logical sequence in explaining its thoughts; makes independent opinions, decisions and conclusions on the dissertation work performed; based on the fact that research methods are used in practice; has the ability to see the prospects for the development of conducted research and the results obtained; the final State answers the questions of the members of the attestation Secretary clearly and concisely, based on the dissertation and the regulatory legal acts related to it; the master's thesis is formalized at the required level.

Grade “4” (“Good”) - The Master has theoretical and practical knowledge in his specialty; is able to show the relevance of the research topic and its connection with practice; understands the essence; partially follows the logical sequence in explaining his thoughts; makes independent feedback, decisions and conclusions on the dissertation work he has done; has the ability to see the research carried out and the prospects for the development of the results obtained; the final State answers the questions of the members of the attestation Secretary; the master's thesis is formalized at the required level.

Grade” 3 (“satisfactory”) - The Master has a certain level of theoretical knowledge in his specialty; is able to show the relevance of the research topic and

its connection with practice; understands the essence; does not follow a logical sequence in explaining his thoughts; he has difficulty making independent opinions, decisions and conclusions on the dissertation work he has done; The answers to the questions of the secretary members of the final State attestation are not substantiated; the master's thesis is formalized at the required level.

Grade” 2 (“unsatisfactory”) - the master’s student does not have sufficient practical and theoretical knowledge in his specialty; cannot indicate the relevance of the research topic and its connection with practice; does not understand the essence; does not follow a logical sequence in explaining his thoughts; has difficulty in making independent opinions, decisions and conclusions on the dissertation work he has done; The final State attestation does not answer questions from Secretary members; the master's thesis is not formalized at the required level.

The final State Attestation Commission is formed from the composition of the secretary members. The counting Commission will consist of at least three people, a chairman and two members. Final state attestation assessments placed on ballots by Secretary members are analyzed by the counting Commission. Final State attestation the assessments of the Secretary's members in relation to the 5 grades are summarized and the average arithmetic value is obtained.

The points and grades awarded to the defense of the dissertation work by the chairman of the counting Commission are published (the minutes of the meeting of the counting Commission are filled out for each graduate student) and approved by the majority of the members of the final state attestation. The conclusion of the chairman is decisive if the number of votes is equal or there is a discussion.

The chairman of the secretary of the final State attestation announces the assessment of the assessments made on the defense of the dissertation work to all participants in the defense, (according to the final state attestation session protocol) declares that the Masters who successfully defended the dissertation work are awarded an academic degree of Master's degree and emphasizes the completion of the meeting.

The dissertation, which is assessed "unsatisfactory" in defense or not recommended for defense by the department, is considered "incomplete", and the undergraduates will have the right to re-defend for the next 3 years.

### **3. SCIENTIFIC SEMINAR**

#### **4.1 Content of the scientific seminar**

The scientific seminar is an integral part of the research work of undergraduates, which ensures the effectiveness of scientific work. The scientific seminar provides methodological assistance to students in the preparation and writing of scientific lectures, articles and master's dissertations.

The purpose of the scientific seminar is the formation of a system of knowledge, skills and competencies necessary for the organization and conduct of research work on the basis of the implementation of a competency - based approach, as well as the presentation of scientific contacts and research results to the public. The scientific seminar is designed to create conditions for graduate students to gain experience in the use of resources and scientific literature, the formation and justification of their position, the presentation of scientific knowledge.

### **Purpose of the scientific seminar:**

- study and generalization of the experience of domestic and foreign researchers in the field of scientific research;
- formation of students ' understanding of the thematic area of the problem with the aim of choosing the scientific direction of the study and the topic of the master's thesis;
- ensuring the necessary methodological training of the student in accordance with the goals and objectives of the master's thesis;
- formation of skills of research activities, including work with sources, databases and scientific literature interpretation of results;
- opportunities for conducting scientific discussions and developing the skills of presenting theoretical concepts and results of their research and their practical implementation (writing lectures and articles, speaking at conferences);
- formation of skills for participation in research projects on the topic of a master's thesis.

The most important task of a scientific seminar is the transformation of scientific work into a place of practical assimilation of rather complex courses within the framework of a particular master's specialty, and not the main and systematic element of the educational process. The student must have the opportunity to develop analytical skills and expand the scope of scientific research in professional fields.

### **The scientific seminar performs the following functions:**

- educational function, which contributes to the formation of knowledge, skills, qualities and personal characteristics necessary for the implementation of scientific activities, forms an individual style of research activity;

- developmental function of undergraduates aimed at improving cognitive, organizational, academic skills, developing their ability to conduct scientific research;
- educational function among graduate students, which contributes to the formation of professional thinking, personal qualities and general worldview;
- stimulating function of undergraduates, ensuring the creation of a positive motivational background for their scientific work, an increase in interest in scientific activities;
- the function of managing, managing the activities of students in the selection, planning, implementation of research work and the defense of a master's thesis;
- control function, providing systematic control of the planned research work of undergraduates, ensuring the determination of the quality of its implementation, the presentation of intermediate results of the research and the decision on the readiness to defend the master's thesis;
- a correctional function that allows students to identify measures of influence (if necessary) in order to make adjustments to the direction and content of the research work.

General and professional competencies of master's students are carried out through the acquisition of the following skills:

- the ability to develop a general and professional level and independently master new research methods;
- the ability to change the profile of his professional activity;
- the ability to independently acquire and use new knowledge and skills;
- the ability to summarize and critically evaluate the results obtained by domestic and foreign researchers, to identify and formulate current problems of theory and practice;
- the ability to substantiate the relevance, theoretical and practical significance of the chosen scientific research topic;
- the ability to present research results in the form of an article, report.

Master's student as a result of working in a scientific-research seminar:

- the ability to independently determine the tasks of the research work;



- the ability to plan, organize and conduct scientific research using modern equipment and computer technology;
- the ability to present the results of work with the help of regulatory documents;
- independent research work and ability to work in a research team;
- professional adaptation, the ability to learn new research methods and technologies;
- responsibility for the quality of the work performed must have skills.
- to demonstrate the basics of scientific thinking and its practical significance in public lectures, in the process of defending a master's thesis;
- theoretical concepts and their presentation in the process of scientific discussions;
- must know the ability to generalize and critically evaluate the results of research carried out by domestic and foreign specialists, to identify and formulate current scientific problems.
- preparation of scientific work, compilation of a synopsis on the chosen topic, consideration of reports and theses of fellow undergraduates and their analysis;
- drawing up scientific conclusions;
- discussion of projects and ready-made research work;
- it is necessary to have the skills to write abstracts, articles, lectures and a master's thesis.

#### **4.2. Organization of scientific seminar**

The main forms of work in a scientific seminar:

- listen to the lectures of leading teachers on current problems of the field of science, methodology and methods of scientific and practical research;
- leading professors, specialists, employers "master classes";
- discussion of scientific articles, monographs, research results, regulatory legal acts on topics related to the problems of the master's specialty;
- speeches of undergraduates with reports (messages) on the chosen research topic;
- classes on the organization and methodology of research;

work with international scientific journals and bases in the publication of research results

- training in writing various types of scientific work;
- lessons on teaching methods of conducting scientific debates, discussions, presentations and discussions;
- discussion of the results of individual research work of master's student
- holding round tables, conferences on the most relevant topics from a theoretical and practical point of view.

The scientific seminar is held in accordance with the training plan of each master's specialty.

The department, which has a master's degree, organizes and conducts a scientific seminar on the basis of a program drawn up according to the nature of the department and the number of master's students. The content of the topics of the scientific seminar and the forms of conduct are determined and approved by the graduate departments.

To lead the scientific seminar, a person is appointed from qualified professors and teachers of the department. The head of the scientific seminar can attract university teachers and scientists, leading researchers, representatives of business, government and local authorities, employers to conduct a scientific seminar.

The scientific seminar is included in the schedule of training sessions of the master's specialty (lesson schedule).

The organization of a scientific seminar includes several stages.

The first year of study.

The scientific seminar begins with vocational-oriented lectures, which share the experience of scientific research work carried out by the professors and teachers of the department, introduce undergraduates to the procedures for organizing scientific projects and part of the results obtained. The main attention is paid to the demonstration of the concepts of research and analytical activity. Such a form of the seminar is designed to help undergraduates choose the topic of the dissertation work and draw up an initial plan for this work. At the first stage, undergraduates will determine the topic and plan of the future master's work. The seminar discusses the theoretical foundations of the study. The master must decide on the essence and structure of the dissertation.

During the Seminar, the organization and coordination of research projects, traditional and latest procedures and methods of working with primary and secondary

information will be introduced. The main attention is paid to the specifics of research and analytical work within the framework of sociological experience. Particular attention is paid to theoretical approaches and examples of empirical research in the analysis of existing materials. Master's students begin to write the first chapter of their master's work. In addition to classes on the organization and conduct of research, training courses on editing and analyzing texts are carried out, which prepares undergraduates to work on their texts. Also, existing databases are analyzed, which can be used when writing Master's dissertations.

Thus, first-year studies are dedicated to the collection and processing of literary and empirical data necessary to write a master's thesis.

#### Second year of study

During the second year of study, the training and discussion of the information necessary for the preparation and writing of the remaining chapters of the master's student disserty is carried out. Master's students undergo discussion in seminars, open discussions. The main task of the second year's work of a graduate student is to complete the writing of the master's work. Graduate students should make a brief presentation on their topics. This makes it possible to discuss in detail the expected results and the scientific methods used in the work. In addition to teachers and speakers, all undergraduates and other interested parties should take an active part in all discussions. Undergraduates should be most active at all stages of the scientific seminar, and in part of the discussions, they should become the main speaker and moderator of the discussions.

### **4.3. Evaluation of the scientific seminar**

Assessment of the activities of graduate students in the scientific seminar is carried out by the head of the scientific seminar.

The evaluation criteria are: participation of students in the scientific seminar and their activity in the discussions in the seminar; timely presentation of the report provided for by the personal calendar plan; participation in the seminar with the presentation of the report; publication and preparation of scientific articles, these and other materials for publication; preparation of reports.

To evaluate the scientific seminar, undergraduates provide the following reports:

The first year of study.

- making a bibliographic list;

- analysis of existing databases;
- published scientific articles, these and other materials; - development of the concept of a master's thesis.

The second year of study.

- writing scientific articles;
- perform at conferences, round tables;
- preparation of the master's thesis;
- preliminary and official defense of the master's thesis.

At the end of the semester, the graduate prepares a report on the scientific seminar during the semester and submits it to the head of the scientific seminar.

A master's students who have not completed the scientific seminar program and are assessed unsatisfactory are considered academic debtors. Debt on a scientific seminar is equated to ordinary academic debt.

## **LIST OF RECOMMENDED LITERATURE**

1. O'zbekiston Respublikasining Konstitusiyasi / O'n ikkinchi chaqiriq O'zbekiston Respublikasi Oliy Kengashining o'n birinchi sessiyasida 1992 yil 8 dekabrda qabul qilingan. –T.: O'zbekiston. 1992. - 49 b.
2. O'zbekiston Respublikasining «Ta'lim to'g'risida»gi qonuni (Barkamol avlod - O'zbekiston taraqqiyotining poydevori. –T.: Sharq nashriyot matbaa-konserni. 1997. –B.20-29.
3. O'zbekiston Respublikasining «Kadrlar tayyorlash milliy dasturi» //Barkamol avlod - O'zbekiston taraqqiyotining poydevori. –T.:Sharq nashriyot matbaa-konserni.1997. B.-31-61.
4. 2017-2021 yillarda O'zbekiston respublikasini rivojlantirishning beshta ustuvor yo'nalishi bo'yicha Harakatlar strategiyasi.O'zbekiston Respublikasi Prezidentining 2017 yil 7 fevraldagi PF- 4947 sonli Farmoni.
5. <sup>1</sup>Magistratura to'g'risida Nizom. O'zbekiston Respublikasi Vazirlar Mahkamasining Magistratura to'g'risidagi nizomni tasdiqlash haqidagi 2015 yil 2 martdagi 36-son qarori.
6. I.Karimov. Yuksak ma'naviyat yengilmas kuch.-Toshkent, Ma'naviyat, 2008.
7. Mirziyoyev Sh.M.Erkin va farovon, demokratik O'zbekiston davlatini birgalikda barpo etamiz. - Toshkent,"O'zbekiston", 2016 yil.

8. Mirziyeyov Sh.M. Tanqidiy tahlil, qat'iy tartib - intizom va shaxsiy javobgarlik –har bir rahbar faoliyatining kundalik qoidasi bo'lishi kerak. - Toshkent, "O'zbekiston", 2017 yil.
9. Magistrlik dissertatsiyalarini tayyorlash bo'yicha metodik tavsiyanoma: magistratura bo'limining barcha mutaxassisliklari uchun mo'ljallangan. T: TDPU, 2010. – 60 b.
10. Аристер Н.И., Загузов Н.И. Процедура подготовки и защиты диссертаций. - М.: АОЗТ "ИКАР", 1995.
11. Бурдин К.С., Веселов П.В. Как оформить научную работу. - М.: Высшая школа, 1973.
12. Кузин Ф.А. Магистерская диссертация. Методика написания и правила оформления. - М.: МАМАРМЕН, 1993.
13. Соловьев В.И. Гносеологические и психологические аспекты реферирования // Изд. дело. Книговедение. ЦБНТИ печати, 1971, № 7.
14. Соловьев В.И. О функциональных свойствах автореферата диссертации и особенности его составления // Научно-техническая информация. - 1981. - Сер. 1, 1981 № 6.
15. Швырев В.С. Научное познание как деятельность.- М., 1984.
16. Аверченков В.И. Основы научного творчества [Электронный ресурс]: учебное пособие/ Аверченков В.И., Малахов Ю.А.— Электрон. текстовые данные.— Брянск: Брянский государственный технический университет, 2012.— 156 с.— Режим доступа: <http://www.iprbookshop.ru/7004>.— ЭБС «IPRbooks»
17. Дроздова Г.И. Научно-исследовательская и творческая работа в семестре [Электронный ресурс]: учебное пособие/ Дроздова Г.И.— Электрон. текстовые данные.— Омск: Омский государственный институт сервиса, 2013.— 66 с.— Режим доступа: <http://www.iprbookshop.ru/18258>.— ЭБС «IPRbooks»
18. Лапп Е.А. Учебно-научная и научно-исследовательская деятельность бакалавра [Электронный ресурс]: учебное пособие/ Лапп Е.А.— Электрон. текстовые данные.— Саратов: Вузовское образование, 2013.— 111 с.— Режим доступа: <http://www.iprbookshop.ru/12718>.— ЭБС «IPRbooks»
19. Организация совместной учебно-исследовательской деятельности в открытом информационном пространстве [Электронный ресурс]: коллективная монография/ Н.Н. Божко [и др.].— Электрон. текстовые данные.— Волгоград: Волгоградский государственный социальнопедагогический университет, «Перемена», 2012.— 166 с. — Режим доступа: <http://www.iprbookshop.ru/21465>.— ЭБС «IPRbooks»

[www.ppf.uni.udm.ru](http://www.ppf.uni.udm.ru)

20. [www.talant.spb.ru/wald.html](http://www.talant.spb.ru/wald.html)
21. [www.school.edu.ru](http://www.school.edu.ru).
22. [www.inter – pedagogika.ru](http://www.inter-pedagogika.ru).
23. [www.ppsy.ru](http://www.ppsy.ru).
24. [www.wings.ru](http://www.wings.ru)
25. [www.ppf.uni.udm.ru](http://www.ppf.uni.udm.ru)
26. [www.search.re.uz](http://www.search.re.uz) - O'zbekistonning axborotlarni izlab topish tizimi.
27. [www.ictcouncil.gov.uz](http://www.ictcouncil.gov.uz) -Kompyuterlashtirishni rivojlantirish bo'yicha Vazirlar Maxkamasi muvoffiq lashtiruvchi Kengashining sayti
28. [www.ecsoman.edu.ru](http://www.ecsoman.edu.ru) - Rossiya Federatsiya oliy o'quv yurtlarida o'qitilayotgan fanlar bo'yicha o'quv-uslubiy komplekslar.

### **List of documents that graduates are submitted to the defense of a master's thesis**

1. Rating notebook (with formalities at the level of demand).
2. "Personal calendar work plan", formalized and approved at the required level. Reports and supporting documents for each semester are submitted to the head of the department in the folder.
3. The master's thesis, formalized on the basis of the regulation "on the magistracy", approved in 2015, is published in two copies (printed, reprinted, certified, sealed) with an electronic variant (on disk).
4. Conclusion of the scientific supervisor.
5. Internal review.
6. External review
7. Extract from the decision of the meeting of the Department on the fact that the master's dissertation has passed the initial defense, appointed internal and external reviewers.
8. Published list of scientific papers and copy of works

### **List of documents that secretaries of the final State Attestation Commission must prepare**

#### **To each magistrate:**

1. Voting ballot (depending on the number of members of the Final State Attestation Commission) is prepared.
2. Counting commission meeting minutes.

3. Registration sheet of the final State Attestation Commission meeting
4. Final state attestation communique

**After Protection:**

- Master's thesis (one copy, with an electronic variant disc)
- 1 Copy of the final state certification account.
- together with the above documents, within a week after protection, it is required to be concentrated in a separate folder and submitted to the magistrate's Department for storage.

«Confirm»

Vice Rector for Academic Affairs

prof.A.S.Soleev \_\_\_\_\_

\_\_\_\_\_ 2021year

**Norms and rules for calculating the duties of a graduate student on leadership in the 2021-2022 academic year**

Stage	Semester	Types of activities				Total
		Scientific guidance of the master's thesis scientific and research work	Scientific management of scientific and pedagogical work	Lead scientific seminar	Lead scientific internship	
1	I.	20	6	4		30
	II.	20	6	4		30
2	III.	20	6	4		30
	IV.	24			6	30

- Guidance of scientific and pedagogical work is attached to one professor-teacher at the Department section
- The leadership of the scientific seminar is attached to one professor-teacher at the Department section
- The leadership of the scientific internship is attached to one professor-teacher at the Department section

**Head of the teaching**

**and methodical department**

**B.S.Alikulov**

**Head of Master's degree Courses**

**N.N.Nizamova**