

**TAJIK NATIONAL UNIVERSITY  
DEPARTMENT OF BIOLOGY**



**PROGRAM  
DEVELOPMENT OF THE BIOLOGICAL  
FACULTY OF THE TAJIK NATIONAL  
UNIVERSITY FOR 2020-2025**

**DUSHANBE - 2020**

## I BRIEF INFORMATION ABOUT THE HISTORY OF THE FACULTY OF BIOLOGY OF THE TAJIK NATIONAL UNIVERSITY

The formation of the Tajik State University was signed by the Chairman of the Council of Ministers I. Stalin and the Chairman of its administration P. Chadayev on March 21, 1947 under No. 643, which began its work on September 1, 1948 with three faculties: agriculture, natural sciences and historical and philology. Since 1948, three faculties began their activities as part of the university: geology-geography-geography (dean professor A.S. Raevsky), biology (dean Ivanenko) and history and philology (dean professor T.P. Maniulova). In the same year, along with the 13 departments that were formed at the university, the departments of botany and zoology were among them.

The Faculty of Biology was founded in 1948 and, along with the university, celebrated its 70th anniversary in 2018. In the initial years of the faculty's education, students were enrolled simultaneously in the 1st and 2nd years of study. The first graduates of the faculty in 1952 were such famous scientists as Doctor of Biological Sciences, Professor L.I. Ismoilova (university diploma No. 1) and A.M. Glazunova.

In 1954, the Faculty of Geology was formed, which was later renamed the Faculty of Natural History. Since 1964, simultaneously with the department of the Faculty of Geology, up to the present time, the Faculty of Biology has separated and works independently.

The faculty was led in different periods of time by eminent scientists who contributed to the development of this science: Doctor of Biological Sciences, Professor D.I. Ivanenko (1948-1954), Ph.D., Associate Professor F.G. Tveritnev (1954 -1958), A.Sh. Shukurov (1958-1962), J.A. Buzrukov (1962-1964), Doctor of Biological Sciences, Professor I.K. ., Associate Professor K.N. Nimatjonova (1970-1977), Doctor of Biological Sciences, Professor H.M. Safarov (1977-1994), Doctor of Biological Sciences, Professor B.F. Gafurov (1994-2002 ), Ph.D. T.J. Iyosov (2002-2008), d.b.s. Mirzorakhimov A. K. (2008-2015). From February 11, 2015 to

the present, the head of the Faculty of Biology is Professor Karimzoda Akobir Izatullo.

The teaching staff made a great contribution to the training of future specialists in various fields of biology. It should be noted that gifted graduates of the faculty contributed to the development and education of highly qualified specialists: A.Sh. Shukurov, I.K. Lopatin, Kh.M. Safarov, M.I. Ismoilov, M.M. Youbova, M.A. Bobojonova, O.A. Starkov, V.I. Chikatunov, A.Kh. Modirov, M.D. Darvoziev, M.B. Ustoev, H.Yu. Yuldoshev, T.J. Giyosov and others. They took a direct part in the scientific and educational relations of the faculty and in raising the level of qualification of teachers with the largest scientific centers in Moscow, St. Petersburg, Novosibirsk, Samarjand, Bukhara.

During the period when Tajikistan acquired state independence, taking into account the needs of personnel and specialists in 2010, a new specialty was formed at the faculty: pharmaceuticals, which consisted of 65 people, and a year later they added medical diagnostics. These specialties today are separate faculties: pharmaceutical and medical. In 2012, on the basis of the Department of Plant Physiology, a new specialty 1-31010103-biotechnology was formed. Taking note of the good work of the university, the Founder of Peace and Unity, the Leader of the Nation, the President of the Republic of Tajikistan, dear Emomali Rahmon, in 2018-2019, the first students were admitted to the specialty 1-75010101-dendrology. At the moment, the faculty trains personnel in 4 specialties (biology, ecology, biotechnology and dendrology). There are six departments: botany, zoology, plant physiology and biotechnology, ecology, human and animal physiology, biochemistry, where 65 teachers, of which 15 are doctors of science, professors and 25 are candidates of science, associate professors are engaged in scientific and educational work of students and carry out scientific and experimental work.

From the first year of the creation of the faculty until 1994, students under its 6 departments (botany, zoology, human and animal physiology, plant

physiology, biochemistry and ecology) studied and graduated from the university in only one specialty - 01600-biology. From 1994 to 2008, on the basis of the department of ecology of the faculty, students in the passive department in the specialty 013100-ecology, in 2016, applicants in this specialty were again admitted. Since 2012, on the basis of the Department of Plant Physiology, training has been conducted in the specialty 1-31010103-biotechnology.

## II GENERAL INFORMATION ABOUT THE FACULTY

The Faculty of Biology of the National University of Tajikistan is the main and leading center of higher professional education in the field of biology, ecology and biotechnology in the Republic of Tajikistan and occupies a prominent place in the training of specialists in the field of biology, ecology, biotechnology and the construction of beaches and lanes (dendrology), as well as in research and the study of various areas of biological sciences.

The faculty in the implementation of the state policy of training highly qualified scientific and scientific-pedagogical specialists, the implementation of state programs and standards, functions as an integral structure of the National University of Tajikistan, provides stable and high-quality staffing in research, general education, secondary and higher professional educational institutions, laboratories, state and non-state enterprises and organizations of the republic and beyond. The faculty from the moment of its creation to the present time has its place in the production of training highly qualified specialists in the field of biology. At the time of independence, due to the increase in the number of institutions of higher professional education, the entry of the Republic of Tajikistan into the international space of education, the emergence of competition for educational services, the status and career of the faculty are stable and develop in accordance with the national values of the statehood of the labor era, labor market norms.

The faculty has 6 departments and has 7 scientific classes for students at the departments, 10 scientific classes for professors, associate professors and the Olympic team.

There are 6 specialized departments in the structure of the faculty, which bear the main responsibility for conducting educational, scientific and educational activities. Specialized departments:

- botany;
- zoology;
- biochemistry;
- ecology;
- plant physiology and biotechnology;
- human and animal physiology.

Faculty of 4 specialties at the undergraduate level (1-31010101 - biologist (profession: biologist, teacher of biology and chemistry), 1-33010101 - ecology (profession: environmental engineer), 1-310102 - biologist - biotechnologist, teacher of biology and 1-75010101 - Dendrology - boulevards foundation and PhD, Doctor of Philosophy (Doctor of Philosophy), Doctor of Philosophy (Ph.D. Doctor of Philosophy) trains specialists. Education in the study groups of the faculty in two languages: Tajik and Russian.

Faculty to provide the learning process with information and communication equipment and technologies and carry out research work-21 class (2 class for 50 people with 1 electronic board, 1 class for 100 people with an electronic board, 11 class for 30 people, 7-class board for laboratory workers in front of departments with 5-electronic classes and 1-class room with 40 computers). All computers are connected to the global Internet.

Teacher teachers are currently 62 full-time, including 14 Doctors of Science (3 women, 11 men), 27 Candidates of Science (7 women, 20 men), 21 unscrupulous teachers (7 women, 14 -men) and 15 technicians and technicians. The number of women participating in the research work of the faculty is 9, of

which 3 are doctors of biological sciences, professor, of which 1 is an academician of the Academy of Sciences of the Republic of Tajikistan, 6 are candidates of biological sciences. The average age of candidates of sciences among men is 48 years, women - 45 years, and doctors of sciences - 68 years among men, women - 72 years. It should be noted that 66.1% of the full-time faculty members are people with a degree.

At the departments of the faculty there are 1 graduate student of the passive department), 58 undergraduates, 5 doctors of science are engaged in research work. There are 32 academic groups in the full-time department, and 35 academic groups in the passive department. 8 Russian groups teach in the daytime and evening departments.

The number of students and undergraduates in the full-time department is 785 people. There are 839 students in the passive department, the total population of which at the faculty is only 1624 people. Of the total number of full-time and evening students, 36 students study according to the presidential quota (24 - girls, (12th boys) 4th student of the 4th year (graduate).

The implementation of this program is aimed at developing the quality of education and upbringing, strengthening the material and technical base and personnel reserve of the faculty, improving the state of laboratories and bringing the educational process in line with the requirements of modern standards, raising the status of the faculty and others contributes to important aspects of the industry.

### **III PURPOSE OF THE PROGRAM**

The main goal of the program is to train competitive specialists in the labor market at the levels of undergraduate, graduate and doctoral studies, doctoral studies in specialties, strengthening the material and technical base, using new teaching methods, developing programs that meet the requirements of existing industry standards, an important way to learn and use modern technologies and foreign languages for various economic branches.

Along with this, ensuring a deep integration of education, science and production is another goal of this program. The issue of improving the quality of education in higher educational institutions of the country, training highly qualified and competitive labor market specialists, improving student literacy, training students on the labor list and the implementation of national values is in the center of attention of the general leadership of the state and the Government of the Republic of Tajikistan.

The founder of peace and national understanding, the Leader of the Nation, the President of the Republic of Tajikistan, the Supreme Citizen, respected Emomali Rahmon, at most meetings and speeches at meetings with representatives of various bodies of society and broad representatives of workers in the field of education and science, sets specific assignments and assignments for the implementation of these tasks. In particular, in one of his speeches it was emphasized: "It is obvious that the activity of a teacher mainly consists of two important areas or aspects: teaching and education. These two areas are connected with each other, and one cannot be imagined without the other. A real teacher must always remember about this connection. This is a teacher who constantly learns and teaches others what he accumulates. But, as follows from the analysis, the quality of education and professional training of university students still cannot meet modern requirements. In response to the constant support and support of the state and the government of the country, you, teachers, professors and employees of the University are obliged to concentrate all your knowledge, experience and skills to improve the quality of education and upbringing of the rising generation of the country in self-knowledge, self-realization, transfer of national values, ethics and ethics.

Therefore, the biological faculty of the National University of Tajikistan considers it necessary to develop and adopt a program for the development of the faculty, taking into account the above factors, in order to create serious changes in education, research and educational plans for 2020-2025. This step is generally

aimed at improving the level and quality of education, the responsibility of teachers for the education and training of students, increasing the literacy of students, their learning in working life, the perception and protection of national interests.

The program for the development of the Faculty of Biology is a scientifically based policy document that includes a plan of prospects, goals, priority areas for the development of biological science, factors for improving the level and quality of education, the introduction of active and innovative methods, modern information and communication technologies in the process of education and upbringing.

#### **IV OBJECTIVES OF THE PROGRAM**

The faculty sets itself clear and specific tasks that determine the further process of its development. Including:

- combining the scientific, educational and creative potential of teachers to solve important issues necessary for the promotion of the faculty;
- improvement and activation of research work (through meetings, round tables, seminars, conferences and scientific symposiums);
- timely fulfillment of the requirements of education programs in Tajikistan, increasing the level and quality of education and upbringing, training of specialists who meet the requirements of the labor market, especially highly qualified specialists;
- attracting qualified specialists from abroad to conduct general lectures, scientific, educational and educational seminars;
- in the form of a presentation (presentation) using modern technologies for the defense of graduation, diploma and master's theses;
- comprehensive support for discoveries, inventions, developments and scientific and practical innovations of students participating in research and development work and reflect theses and take part in production;



-equipment of research and educational laboratories with the necessary equipment;

- training of modern technologies for teachers by conducting short refresher courses at the Institute for Advanced Studies of Teachers of Higher Professional Educational Institutions at the National University of Tajikistan;

- improvement and strengthening of the exchange of students, researchers, teachers and employees to other institutions of higher professional education of the republic and beyond, for advanced training and the acquisition of modern methods for the development of higher education at the faculty;

- increasing the level and efficiency of research work at the departments, the implementation of scientific and practical work on the basis of contracts with manufacturing enterprises;

- to coordinate the production of scientific and practical work of teachers, staff and students. Thus, taking measures to obtain additional material and financial income from research work, inventions and discoveries;

- creation of a unified database of achievements of students, researchers and teachers in the field of science, culture and politics;

- creation of the faculty library;

- improving the activities of the faculty in the direction of training highly qualified specialists, finding ways to attract highly qualified young people to scientific and educational work, ensuring the effective operation of masters and doctoral students of the RCA, doctoral studies in the specialty, using relations with foreign scientific and educational centers in order to train highly qualified specialists in new areas science and technology;

- organization of the Olympiad in biology and ecology among students of educational institutions, lyceums, gymnasiums and schools of a new type of the republic on the basis of the faculty;

- development of textbooks and teaching aids and other means of developing science and knowledge for the environment;

- in the spirit of patriotism, ethics and solidarity, national identity, patriotic pride, responsibility to the Motherland and society, education of students and masters;

- attracting students to constructive and creative work, preventing the emergence of phenomena of alienation and alienation among young people, preventing the consequences of stakes on extremist organizations and organizations and their dangerous impact on the worldview of teachers and students based on the strategic programs of the Republic of Tajikistan;

- adoption and implementation of the necessary measures to attract more citizens of the republic and foreign citizens to study at the faculty, including at the levels of master's and doctoral PhD studies;

- obtaining republican and international grants in the field of science;

- promoting the expansion of cooperation with other institutions of higher professional education and scientific institutions of the republic and abroad;

- attraction of business professors and entrepreneurs from foreign countries to the educational process and science at the faculty;

- holding various competitions in order to increase the prestige of the scientific and educational activities of teachers;

- development and organization of the logo, website and email address of the faculty, including a special promotion on the university website in order to ensure communication and cooperation between other scientific and educational centers and, thus, present the achievements of the faculty;

- in order to improve the material and technical base of the faculty, with the support of the university administration, expand funding for the purchase of tools, reagents, reagents, containers, tools and test devices and other necessary materials;

- structural changes in the departments and the structure of the faculty;

- creation of a new specialty depending on the requirements of the time and the competitive labor market;

- creation of a database of departments of the faculty at manufacturing enterprises and educational institutions.
- taking effective measures and implementing targeted measures to maintain the prestige and prestige of the Faculty of Biology in the direction of training highly qualified personnel and the Center for the Training of Scientific, Scientific, Pedagogical, Engineering and Technological Personnel;
- taking specific measures to train highly qualified and competitive personnel to ensure the internal labor market;
- ensuring the active participation of faculty teachers in the development and discussion of the most important programs and sectoral projects;
- increasing the role of the existing faculties of the faculty in the use of new active and innovative methods in the learning process;
- taking joint measures to improve the level and quality of student training;
- performance of valuable scientific work in connection with the priority areas of research work;
- effective use of the results of scientific research in the process of training and production;
- assistance in conducting retraining and advanced training of faculty teachers in reputable domestic and foreign scientific and educational centers;
- expansion of educational work;
- providing favorable conditions for industrial and pedagogical practice of students and masters;
- increasing the level of passing lectures, practical and test classes;
- activation of the contribution of young teachers to the learning process, research and educational work;
- creation of favorable conditions for obtaining grants, grants and other additional financial resources for the training of scientific and pedagogical personnel, equipping the educational process with information and communication technologies, new biological equipment and accessories;

- ensuring the rights and social interests of teachers, students, masters, postgraduates and doctoral students;

- creation of dissertation councils for the defense of scientific dissertations.

**To achieve these goals, the following tasks are inevitable:**

- maintaining the influence and position of the faculty in the position of the main center for training highly qualified personnel in the field of biology, biotechnology, ecology and the arboretum in the Republic;

- creation of an effective system of work in the field of education and training of students;

- strengthening the capacity of the faculty in the development of priority and important scientific tasks determined by the Government of the Republic of Tajikistan through programs and strategies;

- implementation of the results of the conducted scientific research in the process of training and production;

- promotion of international cooperation;

- development of a transparent and effective system for evaluating the work of teachers and lecturers in order to improve a healthy workspace;

- improvement and strengthening of the material and technical, educational, methodological and research base in order to ensure the solution of the priority tasks of the faculty, harmonizing it with the requirements of modernity;

- creating a favorable and healthy working atmosphere among the teaching staff.

## **V TRAINING PART**

Education is one of the most important and priority areas of the faculty development program, taking into account the main directions of development of higher educational institutions of the country, including the study of priority areas of science in modern conditions, the integration of science into practice, the scientific justification of the educational process, the introduction of modern

forms, methods and technologies in the educational process, increasing the responsibility of teachers in the educational process and the level of knowledge of students, communication of teaching and education, improving social conditions, developing the skills and abilities of teachers, increasing the prestige of the National University of Tajikistan is developed in accordance with the established requirements.

Within the framework of this direction, the goal of the faculty development program is to increase the level of training and education, reform and improve the process of learning and teaching, training specialists of a high level of professionalism and competitiveness of the labor market with full biological knowledge. To achieve the set goals, faculty teachers need to perform a number of works to improve the quality of teaching and learning, since until the teacher understands the goal and the result of his activity is implemented directly in the direction of increasing the knowledge and spirituality of the student, the effectiveness of his teaching will not be significant. activities. Students need to feel that their teachers have a say in the reality, intent and drive to make them literate. Therefore, teachers and faculty members should be mobilized to perform the following work:

**1. In the direction of ensuring a high level of quality of education, stabilizing the position of the Faculty of Biology of the National University of Tajikistan in the market of educational, scientific and industrial services of the republic, the following tasks are required:**

- before the beginning of the academic year (six months of the academic year) preparing the text of lectures, subject questionnaires, test questionnaires, slides, plans and providing students with an electronic or printed version;

- to ensure the educational process of development and development of high-quality scientific, educational and methodological works and innovative character;

- inclusion of active methods and modern technologies in the educational process;
- information support of the educational process;
- modernization of specialized disciplines of departments;
- preparation of textbooks, teaching aids in all subjects specified in the curriculum of the current specialties of the faculty;
- effective use of national components in the learning process;
- taking measures for strict observance of labor discipline in the process of teaching by teachers;
- take measures to completely eliminate violations;
- non-admission and non-admission of arbitrary manipulation of any factors in exchange for unreasonable and unreasonable omission;

## **2. Organization, construction and purposeful use of classes and laboratories in the learning process**

- the purpose of using classrooms, educational, computer and other special educational classes;
- creation of classrooms for modern technical means (computer, video projector, electronic boards, etc.);
- creation of new specialized laboratories and equipping them with modern accessories;
- organization of research laboratories and their implementation using the latest modern accessories;
- creation of an electronic library of the faculty meets modern requirements;

## **3. introduction of new adaptive educational technology to the requirements of the education quality standard**

- increasing the share of students learning subjects using active teaching methods;
- encouragement of the use of information and communication tools in the process of lectures and practical exercises;

- development and printing of new educational and methodological tools for the implementation of educational programs;

- preparation of a new generation of standards for specialties and, on this basis, updating the existing curricula for the levels of primary education, master's and doctoral studies.

- creation of new directions for the training of masters at specialized departments;

- revision and retraining of educational programs and curricula, taking into account the priority areas of scientific and research topics;

- the creation of new educational specialties, taking into account the development of social relations and the need to train biological and technological personnel in certain areas of the national economy.

In the process of improving the quality of education and the level of training of students, it is advisable to use new teaching methods. These methods help prepare specialists in connection with the needs and demands of modern society. The purpose of using new products is to modernize the educational process to train specialists with a high theoretical and scientific level of knowledge, their competitiveness in the labor market. The introduction of modern teaching methods involves the implementation of measures such as:

- teachers and students of the faculty regularly organize and conduct open classes to demonstrate and train young teachers in the best teaching methods and qualifications;

- establishment of a guiding system and provision of advice by professors and scientists of the faculty to young teachers on the planning of training sessions, the use of teaching methods, the choice and implementation of modern technologies;

- systematic organization of the process of participation of heads of departments and former teachers in lectures and practical classes for young

teachers, including the organization of admission to classes within related departments;

- invitation of well-known scientists of universities and scientific institutions, employees of the practice to conduct lectures and practical classes on topical issues of qualification, as well as on the application of teaching and learning methods;

- continuous improvement of modern methods of teaching the educational process;

- inclusion of interactive teaching methods in the educational process;

- effective use of popular and interactive teaching methods;

- modernization of the system of training specialists in order to conduct theoretical and practical classes, use additional and individual forms and methods to improve the level and quality of education (optional classes, student classes, etc.);

- creation of a system of work with entrepreneurs by organizing events, competitions, groups for broader training in educational programs and encouraging entrepreneurs to work in their specialty after graduation from the university, involving them in scientific work;

- retraining and advanced training of teachers and staff in the field of application of modern technologies and modern information and communication means of the educational process;

- organization of seminars, round tables and conferences related to the use of modern teaching methods;

- carrying out continuous monitoring of the quality of education through a unified system of attendance rating, organizing the practice of conducting independent programs, monitoring the quality of education by conducting questionnaires.

The most important issues of conducting the educational life of the faculty in the highest consulting and managerial body of the faculty are considered by the



academic councils and appropriate decisions are made on them, the implementation of which is mandatory for all specialized departments and subjects of the educational process.

The scientific and methodological council of the faculty should take appropriate measures to provide the educational process with useful methodological recommendations, revise and revise curricula, work programs, curricula, examination cards, test questionnaires, examination questionnaires, text of lectures and take specific measures in general to improve the content and content of lectures.

The faculty coordinates the activities of specialized departments and other structural divisions of the faculty in the direction of the implementation of tasks to improve the level and quality of education and raises questions about the introduction of additional measures in this direction.

## **VI SCIENTIFIC PART**

One of the priority areas for the development of the faculty is the implementation of research work. Research work at the specialized faculties of the faculty is carried out taking into account the importance of the issue under study in the development of biological sciences, their relevance in the conditions of building an entrepreneurial state, where in the research plan of each department they are determined and approved depending on the direction, problem and topic.

The main functions of the faculty in the field of science:

- openness of the activities of the Faculty of Biology of the Tajik National University in the field of science;
- adaptation of the scientific activities of teachers and students to the scientific requirements of the present;
- creation of favorable conditions for the implementation of research work;
- in accordance with the chairmanship of the university, take measures to financially support teachers for the creation of scientific and educational works;

- increasing the efficiency of scientific and theoretical knowledge;
- until 2025, fully teachers of the faculty prepare and defend their Ph.D. dissertations;
- increase in the number of doctoral teachers;
- expansion of international cooperation in the field of science;
- organization and conduct of fundamental (fundamental) scientific research;
- increasing the level of scientific and pedagogical excellence of teachers of the faculty, ensuring their training in the direction of modern teaching methods.

The Faculty of Biology acts as a priority area for the development of science:

1. Raising the professional level of faculty teachers. Acts as the dominant form in professional development:

- retraining and improvement of theoretical and practical practice of faculty teachers in prestigious domestic and foreign scientific and educational institutions;
- take measures to further improve the scientific library of the faculty and provide it with the latest scientific literature of domestic and foreign scientists, official publications of industry institutions, newspapers and other authoritative industry scientific and theoretical journals;

2. Increasing the scientific potential of specialized faculties. - taking timely measures to prepare and defend dissertations for the degree of doctor and candidate of biological sciences;

- development and adoption of a plan for research work of the departments of the faculty for 2020-2025, taking into account the new achievements of modern science and the growing demands of the public;

- formation of scientific specialties of specialized departments of the faculty. In this direction, it is necessary to strengthen the activities of teachers of the faculty in the direction of the company and speak at scientific-practical and scientific-theoretical conferences of the republican and international level;

- another important area of scientific activity of the faculty is the participation of teachers in the work of dissertation councils and presentations on the dissertation's official website. Scientific dissertations and author's abstracts provided to the managing teachers, as well as dedicated to them, should be discussed at meetings of the relevant departments, joint meetings of related departments;

- strengthening the work of scientific and theoretical seminars for young researchers of the faculty;

- improving the efficiency of research work of teachers and lecturers in terms of content, quality and quantity. The results of the scientific research conducted by the teachers of the faculty should be expressed in the development and publication of monographs, compresses, scientific articles, etc.

- pay special attention to the publication of scientific articles in publications that include a list of distributed international scientific journals Scopus and Web of Science, distributed scientific journals under the President of the Republic of Tajikistan and under the Ministry of Education and Science of the Russian Federation, as well as in the RSCI (Russian index of scientific citations).

- training of scientific and pedagogical personnel in the system of postgraduate professional education. In this direction, preference should be given to expanding the training of graduate students, traditional doctoral students and doctoral students of the RCD, doctors in their specialty. For the training of highly qualified personnel in the framework of postgraduate and doctoral studies, it is necessary to determine the direction of their scientific research on topical, modern and far-reaching scientific prospects;

- expansion of scientific and practical research within the framework of grants, cooperation agreements and other over-the-counter sources.

- sustainable preservation of the activities of the dissertation council 6D.KOA-024 at the National University of Tajikistan, which in the specialties of biology, researchers defend their dissertations;

- targeted use of doctoral studies in the direction of training highly qualified scientific personnel. Doctoral students should conduct scientific research on priority and valuable topics that are crucial for the growth and development of the Tajik economy;

- training of scientific personnel by improving the qualifications of the doctoral studies of the RCD, a doctor in the specialty and attracting researchers, taking into account the observance of the regulation on the training of scientific and pedagogical personnel at the National University of Tajikistan. It should be noted that the researchers have a good command of the state and foreign languages thanks to the active graduates of the Faculty of Biology of the National University of Tajikistan, who studied well and well, have a high sense of patriotism and responsibility.

- to prepare scientific and branch departments through the titular institute under strict control and to involve high-ranking, knowledgeable, highly intelligent people in the titular meeting. - teachers-entrepreneurs and entrepreneurs (professors and associate professors) can create their own individual research centers and thus involve a certain circle of students in the study of specific scientific topics.

- promoting the development of links between biological and non-biological sciences, the active use of interdisciplinary knowledge in the field of biology education, taking into account the prospects for the formation of interdisciplinary scientific disciplines (molecular biology and biotechnology);

- in accordance with the chairmanship of the university, to establish fruitful cooperation with the Higher Attestation Commission under the President of the Republic of Tajikistan.

### **3. Preparation of students for the implementation of research work.**

1. One of the areas of research work of the faculty is the activity of the scientific community of students and scientific specialties at the departments. In general, the scientific community of students unites the activities of scientific

faculties at the departments. It is desirable that from the very beginning, students are trained in the spirit of doing research work. In this regard, they can conduct their activities in various scientific circles under the departments. Students can receive training and advice from their supervisors at the expense of teachers with experience and a degree, to research and address current topics in the biological sciences, as well as to conduct term papers, abstracts, scientific reports, competitive works, graduation, diploma and magic works on this issue.

The faculty and the specialized department take into account the abilities and talents of students and, taking into account the available opportunities, can involve them in performing research work in the magistracy, postgraduate or doctoral studies of PhD, doctor in the specialty.

Coverage of students by research work consists of the following tasks:

- 1) integration of scientific, educational and educational processes;
- 2) the formation of research skills in teaching students;
- 3) acquaintance of students with modern scientific methodology;
- 4) the formation of skills in working with scientific literature;
- 5) involvement of students in the research work of the faculty;

2. The use of modern educational technologies in the educational process in order to form the basic skills of independent organization and the implementation of research work. In this regard, the following forms of training should be used with the following elements of scientific research:

- conducting scientific and methodological seminars on the basis of the faculty departments, organizing explanatory work and student membership in national libraries and faculties in order to develop skills in working with scientific literature, databases, bibliographic titles and mastering the methods of preparing and writing scientific reports, term papers, graduation papers, diploma, etc.;

- holding seminars related to reviews of scientific literature on various topics and sections of the academic discipline;

- providing advice on the implementation of abstracts, term papers, theses and theses;

- the formation of students' writing skills with the division into scientific materials, as a recommendation at seminars.

- organization of research groups of students within the framework of seminars for the diagnosis of individual laws in force;

- holding a scientific and educational conference for students at the end of the academic year;

- assistance to scientific institutions of students at specialized departments of the faculty;

- assistance and coordination of the scientific community of students of the faculty.

The main activity of the scientific community of students should be:

- participation in the organization and holding of scientific and practical conferences, round tables, competitions of scientific works of students, attracting students to participate in conferences and olympiads of different levels;

- a list of the best scientific articles of students and its publication in scientific journals;

- participation of students in scientific conferences, olympiads and competitions;

- organization and holding of the annual scientific-practical conference of students, masters, doctoral PhD, doctor of specialty and young scientists of the faculty;

- organizing a competition between students of the faculty for the best term paper and diploma work;

- organization and holding of the "Student Science Day";

- holding the competition "The Best Student of the Year" based on the results of students' participation in the scientific activities of the Faculty of Biology;

- identification of gifted students and support for students seeking to continue their studies in the magistracy, assistance to students in choosing questions for future dissertation research and in choosing research material;
- creation of a database at the specialized faculties of the faculty in order to provide scientific and methodological assistance for the research work of students;
- creation of an electronic database of the best scientific publications of students;
- professional development of the Olympic team.

## **VII EDUCATIONAL DEPARTMENT**

Teaching and educational activities become an integral part of the faculty development program. The purpose of the educational activities of the faculty is to educate students in labor, kindred, conscientious, honest, equal, respectful of teachers, adults and colleagues through the implementation of a system of targeted educational measures. In accordance with these aspects, the training of students is carried out through targeted ethical and spiritual educational measures. The education system is built on the basis of ethical, political, labor and spiritual education. The implementation of the education system involves involvement in cultural and civilizational traditions and moral heritage. Educational work between students is conducted consistently, competently and systematically.

They act as priority measures and directions of educational activities:

- education of a student in the spirit of patriotism, national identity and national self-consciousness, consecration of the territorial integrity and integrity of Tajikistan;
- compliance with the internal regulations of the university and student rules;
- strictly refrain from using mobile phones indoors and on campus;
- teaching students to follow the instruction on the sample of clothes of students of higher professional educational institutions;

- to encourage the activities of sponsors of academic groups, taking into account the priority areas for expanding educational work among students. In this regard, it is advisable that the sponsors of academic groups are aware of all aspects of the activities of students and are constantly aware of their population;

- conducting curatorial classes on the topics of everyday life of educational life;

- establishment of mutually beneficial cooperation with the parents of students in the light of the implementation of the requirements of the Law of the Republic of Tajikistan "On the responsibility of parents for the education and upbringing of children";

- take effective measures to ensure the participation of students in passes;

- attending the university with a textbook, books, notebooks and other teaching aids, observing the internal regulations of the hostel, refraining from smoking cigarettes, drinking alcohol, sunflower, etc. within the faculties, universities and hostels;

- compliance with the requirements of a bilateral and trilateral agreement signed by the National University of Tajikistan;

- expanding the active participation of students in republican, international conferences and retraining courses;

- constantly learn about the conditions of life and life of a student in a hostel;

- formation of a high ethical culture of students;

- encouraging a healthy lifestyle, attracting students to participate in mass sports events;

- organization of meetings with law enforcement officers, recognized scientific villages, graduates of the faculty;

- education of students in the spirit of optimistic relations with the homes of the homeless and disabled children, educational institutions;

- facilitating student visits to theaters, museums, exhibitions;



- promotion of cultural and literary events with the involvement of the intelligentsia;
- maintaining and resuming the cultural event of teachers, staff and students of the faculty;
- expansion of explanatory and propaganda work on scientific, educational publications and work in the Library, book base, etc.;
- attracting talented students to various types and genres of musical, cultural and sports art;
- establishing the intellectual potential of students;
- educating a student about caring for state, university property in a hostel;
- education of aesthetic taste of students;
- carrying out preventive and explanatory work related to the prevention of the occurrence of undesirable phenomena, such as drug addiction, dependence, localization, corruption factors, crime among young people;
- formation of spiritual and political education and patriotic education of students;
- support of students' initiatives for the effective implementation of the state youth policy;
- respect for universal and domestic values, rights and freedoms of citizens,
- increasing tolerance in the university class;
- assistance in attracting students to promote their educational activities through the creation of public organizations (youth organization, trade union and other initiative groups).

### **VIII PROGRAM OUTPUTS**

- creation of a material and technical, personnel base and training of personnel for various sectors of the national economy;
- raising the level and quality of education, entering the single world educational space;

- training of scientific and production personnel with a broad scientific outlook and good organizational and production skills;
- strengthening the relationship of the faculty with industrial enterprises, attracting teachers and students to scientific work-research aimed at the benefit of the state and nation;
- providing solutions to the problems of the sphere of the republic through national specialists;
- establishing relations between the faculty and the leading scientific and educational centers of the modern world;
- using the best practices of world educational institutions in the process of training specialists at the faculty.

## **IX FINAL CONCLUSIONS**

The implementation of the development program for the Faculty of Biology of the National University of Tajikistan for 2020-2025 applies to teachers and staff of the faculty and teachers of other general education faculties and faculties of the Tajik National University who teach specific subjects at the Faculty of Biology according to the current curricula.

1. Changes and additions can be made to this program as needed. Amendments and additions are made in the order in which the program was adopted.

2. The state of the program implementation is constantly studied and monitored by working groups, academic consultants, deputy deans, heads of departments and heads of relevant structures of the faculty, and, based on its results, submits a report to the academic council of the faculty.

The program for the development of the Faculty of Biology of the National University of Tajikistan for 2020-2025 was reviewed, discussed and adopted in the expanded team of the Academic Council of the Faculty of Biology of the National

University of Tajikistan with the full involvement of teachers and faculty members  
from December 24, 2019. (Minutes No. 05 of December 24, 2019)

Chairman of the Academic Council,

Doctor of Biological Sciences, Professor

Karimzoda A.I.

Secretary of the Academic Council

Khamidov Kh.N.