

**METHODS OF STUDYING SCIENTIFIC RESEARCH IN ECOLOGY**

**Shakhnoza Jumaniyazova Ishankulieyvna**

**Mukhtarov Umrbek Atanazarovich**

**Son of Davlatov Inoyat Yoldash**

**Kozibayev is the son of Tojiboy Bakhtiyar**

*Urgench State University, Senior Lecturer<sup>1</sup>.*

*Urganch State University 3rd year students of Ecology<sup>2.3.4</sup>*

**Abstract:** *This is scientific knowledge that reflects the objective processes, laws and trends of human knowledge, aimed at the continuous improvement of scientific knowledge. From this point of view, the scientific method is essentially a creative method. Science is the productive force of our society. At present, there is no branch of the economy that has not applied the results of science and its achievements in the course of its activity. The purpose of science is to form systemized knowledge and skills such as a scientific approach to the problem of scientific research, to be able to formulate a problem, to generalize theoretical knowledge, to choose research methods, to be able to conduct experiments and tests, to be able to analyze and formalize the results, and thus to rationally develop their creative works. as well as optimizing their housing capabilities. The purpose of research is to train knowledgeable and highly skilled specialists who are able to know the methods of scientific research, to be able to conduct experiments and tests, to be able to analyze, evaluate and apply the obtained results, as well as to evaluate and evaluate the effectiveness of costs for scientific and technical development.*

**Key words:** *Method, abstract, induction and deduction, Synthesis,*

The purpose of science methodology is to produce principles, the foundation of the principles needed to receive new knowledge, its cultivation. When used as a weapon for new knowledge, it plays a creative methodological role, serves as the accuracy, shape, and element of the scientific technology. Scientists explain the knowledge gained by scientific methodology, interpreted them, as well as their implementation to practice: technical, technology, practical research and grounds.

In this case, general philosophical and general scientific methods of scientific research: analysis and synthesis, induction and deduction, abstraction, progressing from abstraction to concreteness and others are responsible for the scientific creativity of many generations of scientists.

The scientific method is scientific knowledge that reflects the objective processes, laws and trends of human knowledge aimed at continuous improvement of scientific knowledge. From this point of view, the scientific method is essentially a creative method. Scientific creativity means first of all the use of different methods of scientific knowledge as a means of obtaining new scientific knowledge.

Usually, a scientist uses a system of methods, approaches and concepts in his work. That is why scientific creativity is considered to be a method of scientific knowledge and change of reality that is eternal, changing, and adaptable to ever-changing conditions.

The purpose of the subject "Methodology of scientific research" is to provide undergraduate students with theoretical knowledge in the basic concepts, definitions, methods and stages of scientific research, the methodology of conducting scientific research, methods of conducting experiments, methods of developing and analyzing the obtained results, formalizing them and applying them to practice. consists of introducing the methods.

A student who has mastered this subject will be able to carry out scientific research on this subject, methods of conducting scientific research on the subject of his master's thesis, analyze the results of experiments, draw conclusions, apply them to practice, create a mathematical model of the studied object.

The activity of the first President of the Republic of Uzbekistan, I.A. Karimov, is a striking example of a creative approach to the development of problems and prospects of Uzbekistan at the current stage of social development.

In his deep creative research, books, works, lectures, I.A. Karimov deeply analyzed the historical roots and prospects of the social development of the people, society, and the state.

I.A. Karimov's unique and unique creative model of implementing social-democratic reforms became known as the "Uzbek model". In this model, it was announced that our main goal is to build a great democratic country of Uzbekistan in the future, and it is being implemented.

> Science is the productive force of our society. At present, there is no branch of the economy that has not applied the results of science and its achievements in the course of its activity.

> Science is developing so fast that yesterday's dreams are not becoming reality today: spaceships, computers, the Internet, all fields of

technology, etc. All this is based on modern scientific and technical achievements.

> The activities of today's enterprises must be scientifically based and fully meet the requirements of modern science.

> Organization of labor on scientific basis;

> Introduction of new technologies for high harvesting;

> Implementation of agricultural machinery, (diagnostics), technical carving and repairs;

> Use of machinery and computerization in the production process.

A modern researcher, regardless of his field, cannot predict the future of his field without using the results of science.

In all areas of the economy, including in the industrial sector, there is a need for masters who are very knowledgeable and can make independent decisions based on the results of their completed scientific research, so that their work should be focused on the improvement and improvement of labor and production.

That's why every student should prepare for independent master's work.

Today, the university education process is aimed at making students independently engaged in scientific and research work. Based on his theoretical knowledge, conducting practical training at the level of contemporary science will serve as the main foundation for conducting independent scientific work later. Taking into account the above, the main purpose of the science is to familiarize the masters with the content of science and its role in today's society. Based on his theoretical knowledge, this science serves as the main foundation for conducting practical training at the level of contemporary science, and later independent scientific work

**The purpose** of the research is to form systemized knowledge and skills such as a scientific approach to the problem of scientific research, the ability to formulate a problem, to generalize theoretical knowledge, to choose research methods, to conduct experiments and tests, to be able to analyze and formalize the results, and thus to rationalize their creative works. development and optimization of their housing capabilities

**The purpose of research** is to train knowledgeable and highly skilled specialists who can know the methods of scientific research, conduct experiments and tests, analyze, evaluate and apply the obtained results, as well as evaluate and evaluate the effectiveness of costs for scientific and technical development.

In the process of mastering the subject "Methodology of scientific research", the master: to have an idea about the main principles and

features of science and technology development., choosing a research topic and determining the level of research of the problem; designing research processes and creating a working program; research planning and transfer methods; statistical analysis of research results and identification of the best options; should be able to perform statistical analysis of research results; should have the skills to summarize the results of the research and to select the most appropriate one based on making comparative conclusions about the options and to introduce them to the development; must have the skills of science, scientific research methods, types of research, features, main elements of test experiments, designing and conducting experiments, summarizing the obtained results, performing statistical analysis and identifying the best options

The development of enterprises in the development of the "Research Methodology" of the Economy, the management of enterprises, including high-depths, improving the productivity, efficiency of technical means, improving the productivity of technical means, primary served to provide.

In modern information and pedagogical technologies, lectures are carried out in the modern information and pedagogical technologies in teaching the subject "Research methodology". Textbooks, educational and methodological support, lecture notes, texts, and electronic materials, electronic materials, and electronic materials, electronic materials, electronic materials, electronic materials, electronic materials and meletics are used in science. The report is used in the practical lessons in accordance with the rule of pedagogical and information technologies.

Lectures will be conducted using technical equipment and handouts. The main content of the science is described in the lectures, the properties of the dosis and their practical use are revealed. Lectures on this subject are problematic in nature and are aimed at stimulating curiosity and developing creative thinking of graduate students.

Practical classes are held for the purpose of deepening the knowledge gained from the lectures and gaining experience in developing practical skills at the same time. All practical and experimental work is related to the use of computer technologies.

Master's students are monitored in the form of questions and answers during lectures and practical work. The study of the subject is completed by the current, mid-term and final control.

**Conclusion.** Only if we learn these methods of scientific research, we will be able to freely write our scientific research and write an article. For example, our teacher Jumaniyazova Sh is conducting scientific research on

Khorezm lakes. Together with him, we also studied the relevance of its purpose and theme, and after that we understood that we should save the lakes.

### REFERENCES:

1. Richard O. Mines, Jr. "Environmental Engineering" This edition first published 2014, Wiley & Sons, Inc., Ill River Street, Hoboken, New Jersey, 2014, XII, 637 p. - ISBN 978-1-118-80145.
2. Kudratov O. Sanoat ekologiyasi. O`quv kullannya.-T.:CHinor, 2005.
3. Svetkova L.I., Alekseev M.I., Usanov B.P. i dr. Ekologiya, Uchebnik dlya VTUZov.-M.: izdatelstvo ASV:,S'b, Ximizdat, 2001.
4. Uzbekiston Respublikasi Qizil kitobi 2-t.-T.: CHinor ENK, 2009.