Original Article

Methodology Of Applying Mathcat, Maple Mathematical Packages To Practical Courses From Astronomy

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Abstract

This article presents the method of using a number of computer programs that facilitate the practical training of the astronomy course. Teaching astronomy through the use of computer programs not only increases students' interest in science, these programs help students find solutions to problems in a short time and strengthen their knowledge of the subject.

Keywords: Mathcat, Maple, AutoPlay, innovative, practical, task.

Introduction

It is known that now the astronomy is taught with physics at the general secondary schools. The number of hours allocated for the teaching of astronomy is created for its own unique difficulties. Current knowledge on certain objectives requires not enriched out of the achievements of modern knowledge, the intensive development of information technology and the above requirements to use effective methods of training in the educational education system.

It should be noted that it is difficult to say this situation for the astronomy science in teaching various innovative techniques in practice in teaching many disciplines.

The fact is that the leaders of astronomy have been taught as a separate science, and later began to be taught with the subject of Physics, and in 2017 it is being prepared again as a separate subject and very little hours.

The trained analysis of the Asronomary Education, demonstrates the high school, is very low quality in secondary schools. Training materials and teaching methods are not enriched in terms of modern requirements. This science teachers are not fully formed through how to read what it is still necessary to read.

It should be noted that the importance of astronomical knowledge in the development of young people in the understanding of the universe, the structure of the universe and the physical processes in it with a modern physical process. Because the astronomy encourages young potential to develop young potential and create a continuous learning of the universe, and most importantly, the most important is more common superstition and immune to darkness. In this sense, the role of astronomy in the improvement of human worldview is invaluable.

The astronomy is very important in the formation of a person's scientific outlook, such as the source of knowledge, such as the evolution of the universe and physical processes, solar system, universes and stars. The achievements of especially spacecraft contribute to the development of astronomy by making a significant contribution to the development of the astronomy and expanding the perception of the system and universe and enriching human knowledge. One of the most convenient geographical points for the world in the world are being

obtained in the Maydan Observatory in the Republic, which is also expanding the vision of the planet. An invention of a star called Samarkand is an example of this. Nevertheless, the most important and necessary minimum knowledge of astronomy today is a very sad state, that is, innovative educational technology technologies aimed at the formation of science mastery is not developed.

The current educational methods do not meet today's goals of education. The introductory process is left behind more more, on the subject of astronomy, using modern information and methods of telunting opportunities. Such cases require a wide use of effective education technologies, information that can demonstrate the parties specific to astronomical parties

It is known that the traditional medical education system is unlike others, in which the traditional education system is used in it does not allow the necessary sequence and many objects in the universe and direct access bodies in the universe It is difficult to have a clear picture following through through.

For example, as a number of times it appears in the evening of the planets for a few months because of the constantly constant movement of the Earth, many situations are not observed in the evening observation in the evening of the stars through creative thinking, realistically encourages to have an imagination.

The development methods aimed at developing the skills and creative thinking methods aimed at developing the skills and creative thinking methods for the development of scientific awareness and lack of teaching materials for simultaneously and lack of equipment for practical classes poses serious problems in raising the skills quality.

Less effective teaching methods in the formation of modern specialists is focused on the organization of information and communication technologies and telecommunications, based on the active participation of students, innovative pedagogical and interactive methods, as well as the active participation of students in the educational process. It is necessary to re-improve the methods of available teaching methods of science under modern requirements, based on changes and methods of teaching.Access. In the deeper development of teaching materials, the role of practical training in all natural and mathematical sciences is of particular importance in astronomy, space and astrophysics. Although issues from astronomy, the issue of issues of issues of issues of other issues of the fields of astronomy also contain specific features to solve its problems. In particular, the ability to abstracts and imagine students to think and imagine in the situations and movements of celestial bodies, planets, solar and moon. Their issues also have quality and calculation, analytical and synthetic character, such as physics, plays an important role in the development of students such as thinking, thinking, algorithming. Below are the topics related to solving the questions to actively think of the active thinking in this regard.

Solve the sky spheres, its main dots, line and circles. Clessing the issues in coopers coopers and the bolding of the consultations. Solve issues related to the finding lights and components. Solve issues related to the spherical triangle and its main formulas. Solve issues of actual and average solar time and time equation. Solve the sun's exit and sunset condition and the calculation of the azimut of output and sinking points. Solve issues related to the refraction of lights. Classes for Kepler Laws and Configuration of Planeta Pedagogical universities are designated for students of training and the methods of teaching the teaching of the astronomy and astronomical training.

The main part. MAPLE12 Methods of teaching the topic of calculating the height of the horizon using the Maple12 computer package:

Conclusion. The advantages of the above programs are that these programs can be installed on almost all the computer and use it for free. In addition, the volume of programs is also small, which occupies a small space, and for the most convenient for independent reading and operation of the student, the student can strengthen the knowledge of the astronomer.

Literary List

1. G.I.Sayfullaeva, I.R.Kamomov, B.K.Haydarov. // increase the quality efficiency of the student independent work. // "Pedagogical skills" scientific journal. Tashkent. June. 2011. №3.

2. G.I.I.Sayfullaeva, Yu. Naimov, I.R.Kamolov. // Using mathematical calculations in the study of physical parameters of the month. // Collection of scientific articles sent to the "the most talented student of the year". Navoi. February. 2012.

3. G.I.Sayfullaeva, S.S Khanbataev. // Find the weighing power between the sun and giant planets based on mathematical calculation. // Professors and teachers and students of the XXVII program of scientific-practical conferences. Navoi. April. 2012.