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THE ESSENCE OF TEACHING THE SCIENCE OF ASTRONOMY ON THE BASIS OF AN INTEGRATIVE APPROACH

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Annotation:
This article describes the "Sun and Solar System" section of Astronomy with new modern technologies related to education based on information technology. The introduction of new individual, advanced and pedagogical technologies into the educational process requires changing the attitude of the teacher and the student to learning.

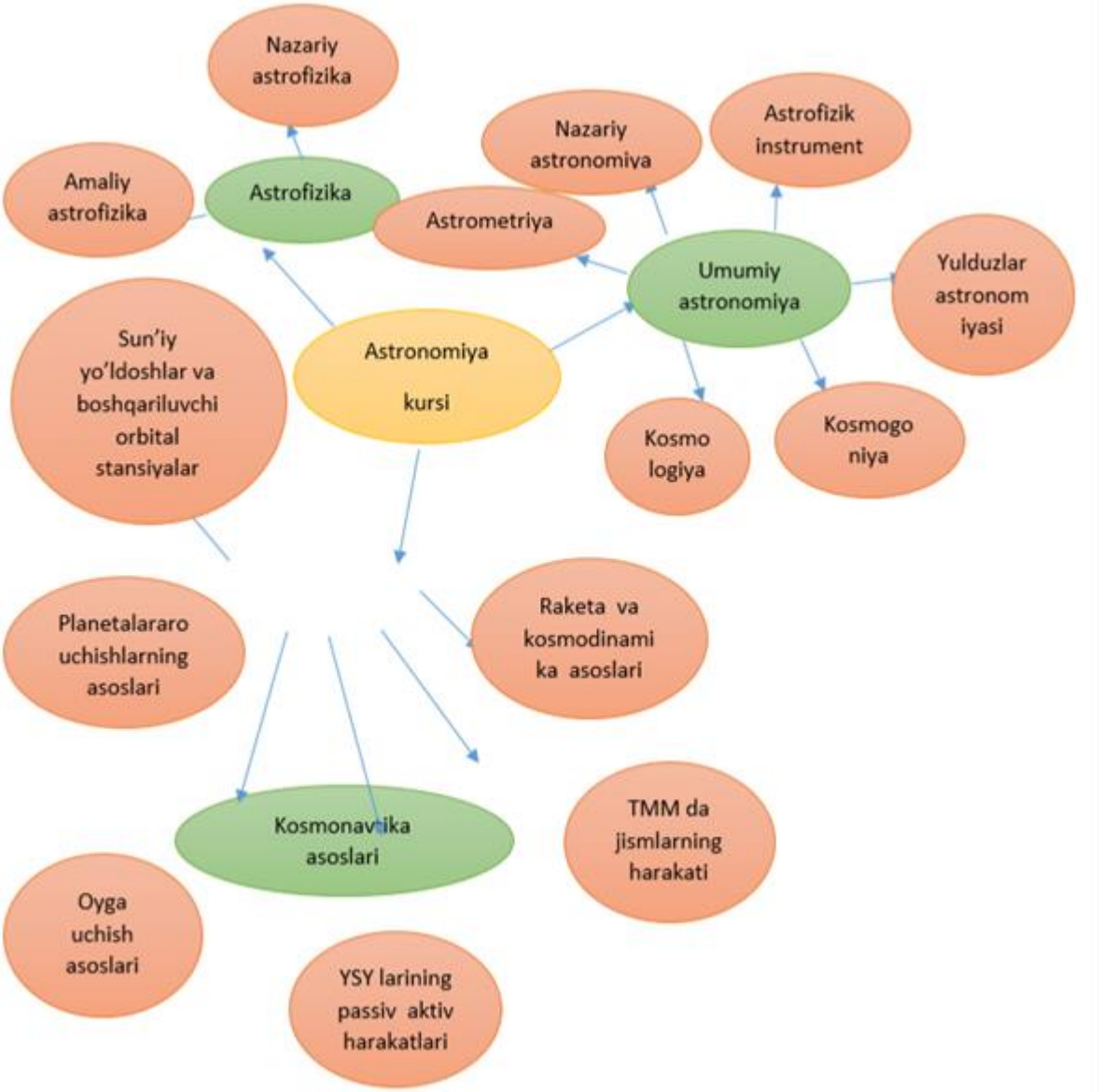
Keywords: Astronomy, interdisciplinary integration, Solar system, physical parameters, integrative approach.

The topic of analysis in the lesson integrated in the teaching of astronomy is multifaceted objects, the information about their essence is available in various sources. It leads to the emergence of qualitatively new types of knowledge expressed in general scientific concepts, categories and approaches in the teaching of astronomy. The participation of relevant astronomy teachers in the organization of integrated lessons is understood as the teaching of astronomical knowledge in connection with various subjects. It allows to easily enter a new data block in the teaching of astronomy, helps to increase the level of general and professional activity of the teacher.

Astronomy, like all natural sciences, is slowly getting closer to understanding the essence of astronomical phenomena. The degree of this convergence has varied over the centuries, and may continue to do so in the teaching of astronomy. According to the approved curriculum for academic lyceums and vocational schools, 36 hours are allotted for the astronomy course. The curriculum of the "Astronomy" course, prepared according to this curriculum, was approved by the Center of Secondary Special and Vocational Education under the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan, and for trial testing. distributed to these educational institutions.

Astronomy course is considered as one of the academic subjects of the cycle of physics and mathematics, and the content of this academic subject is based on the knowledge acquired by students in "The world around us", "Nature", "Geography" and physics and mathematics in the 9th year of secondary schools. . This course equips students of academic lyceums and vocational schools with ideas about the structure of the universe, scientific theories about the origin and evolution of celestial bodies, and knowledge about the astronomical nature of the universe. This educational subject also requires students to independently use star maps, including sky maps, star atlases and globes, as well as school astronomical observation instruments (binoculars, telescopes, theodolites, etc.) , planets and stars) forms skills and abilities to observe. Based on these skills, we can integrate the science of astronomy on the basis of different

departments.



The curriculum of the Astronomy course contains the content of necessary knowledge about the foundations and modern achievements of all its departments. The section on the structure of the solar system and the movement of celestial bodies provides insights into the movement of the planets around the Sun, the cycles of the solar system, and Kepler's laws. The department of practical astronomy provides insights into the celestial coordinates, the movements of celestial bodies, the height of the pole of the universe, and based on this, finding the geographical coordinates of the observation site, determining the time, and the various calendars currently in use, Julian, Gregorian, solar and lunar Hijri calendars. This section introduces the reader to the methods of finding the distance to the celestial meridian and calculating the linear dimensions of the sky. This helps to repeat or generalize the known knowledge when teaching these sections based on an integrative approach.

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