THE RELEVANCE OF AN INTEGRATIVE APPROACH IN TRAINING UNIVERSITY STUDENTS IN RADIATION MEDICINE AND TECHNOLOGY

L. Kh. Zoirova
Candidate of Physical and Mathematical Sciences
Navoi University of Innovations, Navoi city, Uzbekistan
zoirova@mail.ru

With the development of technology and technology, the newest modern disciplines are developing at a very fast pace, the need for which is growing day by day. These are: robotics, mechatronics, alternative energy sources, modern logistics, cluster production and industry, etc.

"Radiation medicine and technology" is a proposed discipline that requires physical knowledge to understand the principle of operation of diagnostic devices widely used in medicine at the present time, such as ultrasound, ECG, EchoCG, MRI, PET examination, X-ray examination, CT (computed tomography), MSCT, etc., for the concept of molecular the basics of vital processes, the features of the participation of various chemical compounds in the metabolism and energy processes of a healthy body, as well as for the diagnosis of metabolic disorders in pathological conditions [1,2].

In general, for example, when teaching the topic "Ionizing radiation in medicine", it is considered appropriate if the topic is studied on the basis of an integrative approach model that includes interdisciplinary integration and integration between types of education, it reveals the relationship of the subject with radiation physics (the nature and properties of ionizing radiation), mathematics (mathematical calculations), chemistry (chemical properties radiation), history (historical and biographical approach of ionizing radiation), radiology (dose loads of ionizing radiation), radiation safety, medical diagnostics and other subjects in the blocks of the curriculum [3]. Integration between types of training serves to link lectures, seminars, practical, laboratory classes with independent learning and other types of training. However, the main ones are practical exercises, where the teacher has the opportunity to conduct individual work. Modern electronic learning tools and such areas as information and communication technologies, multimedia technologies, and distance learning are becoming increasingly important in the educational sphere [4].

Thus, by teaching students using an integrative approach in the discipline "Radiation Medicine and Technology", it is possible to significantly increase the level of education in universities, thereby achieving innovation and development in the field of healthcare, construction, mining, etc.

Literature

1. Stozharov A.N. Radiatsionnaya meditsina. Uchebno-metodicheskoye posobiye. Izdaniye tretye. Minsk, 2007 g. Str. 75-78.
2. Nechaeva V.G., Shevchenko E.V., Voronova L.K., Korzhuev A.V. Teaching physics at a medical University: history and modernity. Siberian medical journal. No.7, 2010. -P. 36-39.
3. Zoirova L.Kh., Bozorov E.Kh., Khusanov Z.J., Sattorova Sh.G., Kuvvatova M.A. Use of various innovative-interactive methods in teaching the science of “Radiation medicine and technologies” in higher education. // Journal of Pharmaceutical Negative Results. Volume 13, Special Issue 7, 2022. Scopus Q4. Pp. 3248-3252. DOI: 10.47750/pnr.2022.13.S07.423.
4. Zoirova L.Kh. Organization of effective use of interactive methods in the development of problems of radiation medicine and technology. // International Journal of Early Chilhood Spesial Eucation (INT-JECS), ISSN: 1308-5581, Vol 14, Issue 03 2022. –pp. 10040-10043. DOI: 10.9756/INT-JECSE/V1413.1165. Web of science (WoS) Q3.