СЕКЦІЯ «ТЕОРІЯ І ПРАКТИКА ЗДОРОВ'ЯЗБЕРЕЖЕННЯ»

UDC 378:613;614

DISCIPLINES OF HIGHER EDUCATION INSTITUTIONS THAT FORM VALEOLOGICAL COMPETENCE A.S. Shevchenko¹, V.V. Shevchenko²

¹Ukrainian Engineering Pedagogics Academy ²National Technical University "Kharkiv Polytechnical Institute" al.shevchenko1976@gmail.com

Annotation. Health saving issues are included in most state education standards of Ukraine. But for the full formation of valeological competence, special valeological disciplines are necessary ("Valeology", "Fundamentals of Life Safety", "Fundamentals of Medical Knowledge and Health Saving", "Health Pedagogy"). Related disciplines ("Ecology", "Occupational Safety") only partially form competence.

Keywords: valeological (health-saving) competence, valeological disciplines, educational standards.

In 2019–2022, the Ukrainian Engineering Pedagogics Academy and the National Technical University "Kharkiv Polytechnic Institute" trained non-medical students in the valeological disciplines "Health Pedagogy" and "Fundamentals of Medical Knowledge and Health Saving", respectively. The goal of teaching was the formation of valeological competence in students, by which we understand the ability to lead a healthy lifestyle, practice safe behavior and first medical aid in emergency situations [1]. Competence formation at the level of no less than "understand" for bachelors, and no less than "apply" for masters of non-medical specialties, in accordance with Bloom's modified taxonomy [2] is allowed (*Fig.*). An important fact is the consistent formation of competence levels, in which each subsequent level includes all the previous ones.

Level of competence formation

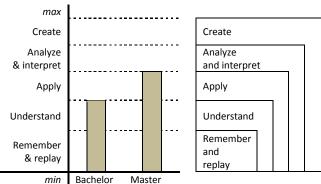


Fig. Valeological competence formation levels among non-medical students according to Bloom's modified taxonomy.

 a – the minimum level of formation of valeological competence depending on the educational level (bachelor and master);

 ${\it b}$ – scheme of successive achievement of competence levels.

To form a full-fledged valeological competence, it is necessary to study the program of the discipline on 14 topics:

- 1. Health-saving in education;
- 2. Rational nutrition;
- 3. Physical culture and sports, mode of work and rest;
- 4. Safe use of medicines;
- 5. Trauma. Domestic violence. Bullying;
- 6. Poisoning, radiation, occupational diseases;
- 7. Emergencies;
- 8. Blood and organ donation;
- 9. Cardiovascular and pulmonary diseases;
- 10. Infectious and parasitic diseases;
- 11. Inclusive education;
- 12. Mental and psychological health. Professional burnout;
- 13. Sex education and family planning;
- 14. Chemical dependencies.

The educational programs of the disciplines "Health Pedagogy" and "Fundamentals of Medical Knowledge and Health-Saving" differ in the didactic component intended for students of the engineering-pedagogical study profile. Graduates of this specialty should be able to teach their future students about health-saving. The master's program completely repeats the bachelor's program, and in addition contains additional theoretical information and tasks for the formation of valeological competence in masters at a higher level. The two programs are based on the study of diseases that cause the largest number of deaths in the world and in Ukraine, but have manageable and conditionally manageable risk factors. Prevention of diseases is aimed precisely at mitigating the effect of these risk factors. The evaluation of the success of the formation of valeological competence is based on the factor-criterion qualitative reference model, with which the personal successes of students are compared [3].

The initial level of students' knowledge of anatomy, human physiology, hygiene, biology and chemistry is important for the successful study of valeological disciplines. Studying related to valeological disciplines of "Ecology" and "Occupational Safety" are useful. Especially if these disciplines are studied on the eve of valeological disciplines.

At NTU "KhPI", training of specialists in engineering (industrial production) specialties takes place, including at the Department of Labor and Environmental Protection. As a result of studying the discipline "Ecology", students should develop a special (professional) competence "the ability to use methods of determining the levels of negative effects on humans and the environment", and the programmatic (expected) result of training is the ability to determine potential sources of pollution of the natural environment and their impact on human health [4]. In the course of ecology, the issues of anthropogenic influence on the biosphere, rational nature management are studied. But in the disciplines "Health Pedagogy" and "Fundamentals of Medical Knowledge and Health-Saving", the main environmental emphasis is placed on the issue of mitigating the impact on humans of chemical, biological and radiation pollution of grants, water, air and food.

The programmatic (expected) outcome of students' training in the discipline "Fundamentals of Occupational Safety and Human Health" [5] is their ability to maintain a healthy lifestyle. But the main emphasis is naturally placed on the "man – machine – production environment" system, the theory of traumatism, psychological resistance to accidents at work, risk factors of occupational diseases (air pollution of the working area, vibro-acoustic health risk factors, regulation of microclimate parameters, lighting, information on electrical and fire safety, protection of the population in emergency situations in peacetime and wartime). The issue of providing first aid to victims in an emergency situation is important.

Thus, these related disciplines are able to form only part of the components of valeological competence necessary for life and professional activity. And even if students have disciplines in "Ecology" and "Occupational Safety", it is desirable to include a valeological discipline in the program, normative or optional.

References

- 1. Shevchenko A., Shtefan L. Formation of valeological competence in non-medical students. Engineering and Educational Technologies. 2021. Vol. 9, No. 4. P. 8–23. DOI: 10.30929/2307-9770.2021.09.04.01.
- 2. Bloom B.S. Taxonomy of education objectives: The classification of education goals: Handbook I, cognitive domain. NY: Longman, 1956.
- 3. Shevchenko A. Qualimetric criteria for formation of valeological competence in the adaptive education system. Adaptive management: theory and practice. "Pedagogy" series. 2022. Vol. 13, No.25. 18 p. URL: https://amtp.org.ua/index.php/journal/article/view/456/396

- 4. Educational program (typical) on the discipline "Ecology" for the training of specialists at the educational and professional level of a bachelor. Kharkiv: NTU "KhPI", 2016. 14 p. [In Ukrainian].
- 5. Educational program on the discipline "Fundamentals of Occupational Safety and Human Health". For bachelors of specialty 141 Electric power engineering, electrical engineering and electromechanics. Kharkiv: NTU "KhPI", 2021. 17 p. [In Ukrainian].

Cite in Vancouver style in English: [Shevchenko AS, Shevchenko VV. Disciplines of Higher Education Institutions that form valeological competence. Collection of abstracts of the III International scientific and practical conference "Natural science and education: current state and prospects of development" (September 22–23, 2022, H.S. Skovoroda KhNPU, Kharkiv, Ukraine). P. 93-5. https://doi.org/10.5281/zenodo.7311328]