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THE METHODOLOGY OF STUDENTS' SYNERGETIC WORLD OUTLOOK DEVELOPMENT BASED ON THE TRANS-DISCIPLINARY APPROACH

Abstract. The paper discusses the present stage of the world educational system development influenced by the fast increasing flow of information and knowledge. The situation requires the adequate pedagogical technologies for compressing the learning information; one of them is the trans-disciplinary technology based on the synergetic methodology identifying the order parameters and general conformities of organizing the academic content. The trans-disciplinary technologies incorporate the general laws of evolution, Bohr's principle of complementarity, fundamental concepts of nonlinearity, fractality, actual and potential infinity, etc. As an illustration to the trans-disciplinary approach, the author analyzes the fundamental methodology principles of Aristotle and Newton's mechanics.

The author points out the equal importance of understanding the asymptotic adequacy principle by students of the natural sciences and humanities profiles; implementation of the trans-disciplinary approach being regarded as a way for the fundamental knowledge acquisition and the world outlook development.

The research findings are addressed to the higher school academic staff for theoretical and practical applications.

Keywords: synergetics, post-non-classical science, order parameter, trans-disciplinary principle.

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