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## Modular training associated with differentiation and individualization of learning, taking into account the level of knowledge

For formation of professional competence of the future engineer APC need to comply with a number of priority pedagogical conditions that will facilitate the implementation of the structural - content model of the process of formation of professional competence of future engineers APC.

Professional competence of future engineers AIC is a complex multi step process.

Having studied the psychological-educational literature, we conclude that the pedagogical condition aimed at increasing the level of maturity of professional competence of engineers APC is organization of educational process on the basis of modular training in the study of the discipline "labor protection".

Fast scientific - technical progress has led to a large number of new threats as for individual person, and society and civilization as a whole. The factors of working conditions and human life, which exceed all adaptation, physiological and psychological capabilities of the organism are formed in the modern technosphere. [1].

Currently, there is a lot of literature on the study of various aspects of safety labor, industry specific of problems. For better absorption of educational information and enhance professional competence of future engineers APK, we

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propose to improve the process of studying the discipline "labor protection" through implementation of modular training.

We analyze a system of "Man-machine-environment" from the viewpoint of formation of hazardous and harmful productions, capacity of the human organism in the conditions of production activities and ensuring technical, legal, organizational and sanitary protection of human at the production.

Flexibility of modular training is associated with differentiation and individualization of learning, taking into account the level of knowledge, needs, individual tempo of learning activities of student. The positive role of modular training affects to perception the prospects of studying discipline "Labor protection" by students [2].

Contents of the first module are the link that unites all the other training modules. In the second training module "Human Features like element in the man - machine - environment" is a complex system with multiply forward and backward linkages. In the third training module "Characteristic of machine as an element in the system of man - machine - environment," study a construction machine or mechanism, which should provide energetic, spatial, biological, informational and aesthetic compatibility of man and machine. In the fourth training module "Characteristic environment as an element in the system of man - machine - environment" is an element in the system of man - machine - environment" is an element of the "environment" that exists in all human activities: at work, at home, in emergency situations, etc. In the fifth training module discipline "Labor protection" is as applied science. Contents of the fifth module can be independent in pale the sciences such as, for example, "Ergonomics", "Engineering psychology", "Industrial art", "occupational health", "Scientific organization of labor."

In the Engineering Faculty of the KSU A.Baitursynov during in the educational process we use modular - rating system that allows you to identify the activity of each student in the study of this discipline.

Effectiveness of human activities based on the level of mental stress, so the student should further study the response characteristics of the psyche on

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production factors in the system "man - machine - work environment" in the process of studying the discipline "Labor protection". Knowledge of these issues increases the operability of human, excludes or reduces traumatism and occupational diseases, as well as increases the reliability of the system "man - machine".

In conclusion, I would like to emphasize the importance of studying the physiological and psychological characteristics of human in the system "man - machine - work environment."

This will reveal the objective indicators of mental performance, the characteristics of individual style, and the causes of fatigue man in different situations.

## Literature:

1. Kukin P.P. Bezopasnost' zhiznedeyatel'nosti. Proizvodstvennaya bezopasnost' i okhrana truda / P.P. Kukin, V.L. Lapin, N.L. Ponomarov. – M.: Vyssh. shk., 2003. – 439s.

2. Unt I.E. Individualizatsiya i differentsiatsiya obucheniya / I.E. Unt. – M.: Pedagogika, 1989.- 192p.