ELECTIVES DISCIPLINES IN THE SYSTEM OF TRAINING OF MASTER STUDENTS THROUGH THE POGRAMME "CONTEMPORARY CONCEPTS OF NATURE"

Zavarykina L.N., Korolev M.U., Koroleva L.V., Petrova E.B.

Moscow State Pedagogical University,
Institute of Physics, Technology and Information Systems,
Department of Physics for Natural Sciences Faculties,
Krasnoprudnaya, 14, Moscow, Russia, 107140, tel. 8(499)2644683
E-mail: lor30@mail.ru, maxkor67@mail.ru, koroleva_lv@list.ru, 1960_15@list.ru

The master programme "Contemporary Concepts of Nature" within Pedagogical Education degree course was developed to train teachers of general science and researchers in science education as professionals of a new standard [1, 3, 4]. This determines the main feature of the programme – its interdisciplinary and integrative character [2].

The programme "Contemporary Concepts of Nature" aims at 1) integration of physical, chemical, biological, geographical, ecological knowledge about nature; 2) forming and uncovering theoretical and methodological foundations of the scientific world view.

Apart from core disciplines elective disciplines are included into the pogramme. They serve as an important tool of implementation of the key concept that combines two directions in students' education: scientific and methodological. Master students have an opportunity to choose five elective disciplines.

Implementation of an integrative approach helps to overcome the main obstacle: didactic requirements to essential minimum of teaching material and limited time for its acquiring. Several issues about a place, themes, structure, content, methodological foundations and delivery of the elective disciplines within master programmes are raised in this regard.

The report looks at the content and sequence of courses through examples of some disciplines. Organizational and content-related aspects of study sessions delivery, students' autonomous learning are also discussed in the paper.

Reference

- 1. Zavarykina L.N., Korolev M.U., Koroleva L.V., Petrova E.B., Master programme "Contemporary Concepts of Nature" concepts, structure, content // Physical Science Education in Higher Education Institutions, Vol. 19, № 4, 2013. PP. 107–117.
- 2. Koroleva L.V., Korolev M.U., Petrova E.B. Integration processes in Education // Science and School, No 5, 2009. PP. 3-6.
- 3. *Zavarykina L.N.*, *Korolev M. U.*, *Koroleva L.V.*, *Petrova E.B. et al.* Contemporary Concepts of Nature. Part 1. M.: MSPU, 2012. 132 p.
- 4. *Zavarykina L.N.*, *Korolev M. U.*, *Koroleva L.V.*., *Petrova E.B. et al.* Contemporary Concepts of Nature. Part 2. M.: MSPU, 2013. 168 p.