



DOI 10.22363/2313-2310-2021-29-3-277-281
UDC 371.3

Scientific report / Научное сообщение

Training in environmental, occupational, industrial and fire safety management at the university, summer school, organization

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Abstract. The article examines the role of training in environmental protection management, industrial and fire safety, labor protection, including training in first aid skills. Currently, more and more attention is paid not only to environmental protection, but also to related HSE management issues. The relationship between environmental and occupational safety issues, including fire and industrial safety issues, is determined by the impact of the results of accidents and incidents on the environment. The whole complex of preventive measures aimed at minimizing the impact on the environment is simultaneously aimed at ensuring the safety of the employees, preserving their life and health. In the event that all measures for managing production processes could not ensure the safety of the employees, it is necessary to provide first aid, before medical aid is available. Training in first aid, occupational safety, and minimization of impact on the environment skills is important not only at the university as part of a training program or summer schools, but also in organizations to ensure the safety of the work carried out. In addition, teaching these issues is important from an early age – starting from kindergarten, school and earlier.

Keywords: environment protection, health and safety, fire and industrial safety, first aid training, training through sport excitement, summer schools, school of HSE management

Article history: received 18.11.2021; revised 30.12.2021.

For citation: Golovacheva IV, Pinaev VE. Training in environmental, occupational, industrial and fire safety management at the university, summer school, organization. *RUDN Journal of Ecology and Life Safety*. 2021;29(3):277–281. <http://dx.doi.org/10.22363/2313-2310-2021-29-3-277-281>

Обучение вопросам управления охраной окружающей среды и труда, промышленной и пожарной безопасностью в университете, летней школе, организации

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Аннотация. Рассматривается роль обучения вопросам управления охраной окружающей среды, промышленной и пожарной безопасностью, охраной труда, включая вопросы обучения навыкам оказания первой помощи. В настоящее время все больше

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внимания уделяется вопросам не только охраны окружающей среды, но и смежным вопросам HSE-менеджмента. Связь вопросов охраны окружающей среды и охраны труда, включая вопросы пожарной и промышленной безопасности, определяется воздействием результатов аварий и инцидентов на окружающую среду. Весь комплекс превентивных мер, нацеленных на минимизацию воздействия на окружающую среду, одновременно направлен на обеспечение безопасности работника, сохранение его жизни и здоровья. В том случае если все меры по управлению производственными процессами не смогли обеспечить безопасность сотрудника, необходимо оказать первую помощь до оказания медицинской помощи. Обучение навыкам оказания первой помощи, охраны труда, минимизации воздействия на окружающую среду важно не только в университете в рамках обучающей программы или летних школ, но также и в организациях для обеспечения безопасности проводимых работ. Кроме того, обучение данным вопросам важно с самого раннего возраста – начиная с детского сада, школы и ранее.

Ключевые слова: охрана окружающей среды, охрана труда, промышленная и пожарная безопасность, обучение, навыки оказания первой помощи, обучение через спортивный азарт, летние школы, школа HSE-менеджмента

История статьи: поступила в редакцию 18.11.2021; принята к публикации 30.12.2021.

Для цитирования: *Golovacheva I.V., Pinaev V.E.* Training in environmental, occupational, industrial and fire safety management at the university, summer school, organization // Вестник Российского университета дружбы народов. Серия: Экология и безопасность жизнедеятельности. 2021. Т. 29. № 3. С. 277–281. <http://dx.doi.org/10.22363/2313-2310-2021-29-3-277-281>

Introduction

Activities related to health safety and environment (HSE) topics are more and more demanding not only due to natural disasters [1] and need of decrease impact on environment [2], but also increasing possibility of different industrial accidents and terrorist attacks.

A lot of articles are dedicated to environment protection in different aspects of modern life [3; 4], but also first aid [5; 6], health and safety [7; 8] in different aspects.

The research questions raised in the article are the following ones:

RQ1. Can University course in HSE be interesting and rewarding too the students?

RQ2. Are summer schools sufficient for HSE trainings?

RQ3. How employers can effectively train employees?

We hypothesize that best approach in HSE training is practically oriented one. First aid trainings are work better when sport excitement is involved irrespectively of age category of participants. HSE trainings are necessary at any age and profession.

Methods and results

This research represents the experience of performing HSE courses in different organizations, starting secondary schools, standard RUDN University classes, summer schools in Institute of Environmental Engineering of the RUDN University and activities according to the contracts in different industrial companies. Most of these activities were performed with the help of HSE management school.¹

¹ School of HSE management. URL: <https://vk.com/hsemanagementeco>

These trainings in most cases involved not only environmental part (waste segregation practices, sustainable development, carbon footprint, recycling, etc.), but also health and safety (HSE audits performance, training on safe execution of certain practices), fire and industrial safety, based on work experience of industrial enterprises, but also first aid training through sport excitement, so called life wrestling practices.²

First aid trainings are more popular among school children audience and as original way of team building. Environmental practices are mostly requested by companies and universities, while health and industrial safety is usually taken as a “garnishment” to one of those above.

It is necessary to mention that HSE courses including first aid are important not only for students of environmental specialties, but also to engineers, veterinary and agricultural specialties. Speaking in general terms HSE is one of the top disciplines which will be examined by the life itself, even the students in most cases do not realize it.

Besides approaches listed above there is a reliable method of HSE skills improvement – online courses developed by practicing specialists, on the basis of legal requirements and practice, i. e. at the platform OpenLearning,³ course “HSE Management and Audit” where already more than 240 students participated in the course [9; 10].

Conclusion

HSE training activities are important in university educational process, summer schools and company trainings. Better results can be achieved if students are familiar with health and safety requirements from an early age and are accustomed to follow them. Long term knowledge can be developed through sport excitement and involvement in project works and case studies when students are deeply involved while developing own projects, based on local requirements and background.

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² Национальный центр обучения навыкам оказания первой помощи «Школа Бубнова» <http://spas01.ru/>

³ OpenLearning. URL: <https://www.openlearning.com/rudn/courses/hse-management-and-audit/?cl=1> (дата обращения: 18.11.2021).

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