# **MEDIA CULTURE**

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# SPECIAL COURSE "PROFESSIONALLY ORIENTED MEDIA EDUCATION IN THE DISCIPLINE "ENVIRONMENTAL SAFETY" FOR FUTURE EMPLOYEES OF ENGINEERING SPECIALITIES

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Abstract. The modern educational process in the field of applied ecology is largely based on the use of the internet. Applied ecology, in turn, includes technoecology: environmental aspects of economic sectors, use of natural resources, nature (environmental) protection, environmental economics and environmental management, environmental audit, environmental marketing, environmental law, environmental standardisation, environmental management and environmental protection, environmental monitoring and environmental forecasting, radiation and space ecology. Media literacy has become a key feature of a specialist's professionalism. Its acquisition encourages the development of media education technologies. Contemporary researchers and practitioners have examined various aspects of using the media and their products in the educational process. Universities are offering special courses in media education, which indicates both extensive and intensive development of media didactics in higher education, which is enriched with the latest technologies, terms, concepts and at the same time penetrates the newest areas of knowledge. Our study proposes a programme of a new special course "professionally oriented media education in the discipline "environmental safety" for future engineering professionals and provides examples of the application of media education methods and tools in teaching the discipline "environmental safety in the oil and gas industry".

*Keywords:* applied ecology, media culture, media didactics of higher education, media education, professionally oriented media education, special course, professional competence, media competence, development of professional competence.

## INTRODUCTION

Many foreign and Ukrainian scientists have worked fruitfully on the problems of environmental safety of technological processes (applied ecology) in the late twentieth and early twenty-first centuries, in particular Ansof I., Balatsky O. F., Borshchevsky P. P., Burkinsky B. V., Veklych O. P., Vyshniakov Y. D., Voloshin V. V., Galushko O. S., Gerasymchuk Z. V., Girusov E. V., Gorlachuk V. V., Prusov E. V., Dzhigirey B. C., Doroguntsov S. I., Kredisov A. P., Lyashenko I., Lebedynskyi Y. P., Landar G. I., Melnyk L. G., Mishchenko B. C., Palamarchuk V. O., Putilov A. V., Sally V. I., Sakhayev V. G., Sokur M. I., Stadnytskyi Y. I., Stepanov V. N., Timchenko O. G., Trehubchuk V. M., Tunitsa Y. Y., Turilo A. M., Fedorishcheva A. M., Fyk I. M., Chumachenko M. G., Chukhno A., Shevchuk V. Y., Shmandiy V. M., Yatsyshyn T. M, as well as Felix Dodds, Norman Myers, Jessica Touchman Matthews, Michael Renner, Richard Ullman, Arthur Westing, Michael Kleir, Thomas Homer Dixon, Jeffrey Dabelko, Peter Gleick, Rita Floyd, and Joseph Romm, among others.

Environmental safety is defined in relation to the territories of states, regions, administrative regions and districts, cities and villages, or to economic objects - oil and gas fields, industrial units, factories, etc, factories, other industrial facilities, in particular, transport, energy, chemistry, mining, communications, etc.

Unfortunately, the works of scientists that can be recommended for expanding and deepening knowledge in the field of environmental safety are not fully represented on the Internet. This hinders the modern process of education and self-education with the use of media, in particular, Internet didactics.

**THE PURPOSE OF THE ARTICLE** is to present the thematic plan of the special course "PROFESSIONALLY ORIENTED MEDIA EDUCATION IN THE DISCIPLINE "ENVIRONMENTAL SAFETY" FOR FUTURE ENGINEERING PROFESSIONALS.

# **OBJECTIVES OF THE STUDY**

To offer the special course specified in the purpose, to acquaint the educational community with the example of its implementation in the educational process of a polytechnic university, with the possibilities of its transformation in educational institutions of different areas of training in order to intensify the use of professional media sources in the educational field.

## RESEARCH METHODS

The study used general scientific methods: analysis and synthesis, analogy, system analysis, observation.

# PRESENTATION OF THE MAIN MATERIAL

The concept of "professionally oriented media education" first appeared in the publications of the journal "Higher Education of Ukraine" (Onkovych 2014, 85–87; Onkovych 2014, 205-211). Subsequently, it became part of the umbrella concept of "media didactics" (Onkovych 2013, 23–29).

The problems of university media education were studied by the staff of the Department of Theory and Methodology of Humanities Education of the Institute of Higher Education of the National Academy of Sciences of Ukraine. They focused on media didactics and media education technologies. At the beginning of the twenty-first century, a number of dissertations were defended here on press didactics, Internet didactics, critical thinking development, media education technologies in documentary studies, media education for masters in computer science, masters in oil and gas, etc. Under the supervision of the staff of the Institute of Higher Education of the NAES, they also completed dissertations on teledidactics, radio didactics, media music, and special courses on media education for universities (Hryshkova 2007, 36; Chemerys 2006, 20).

Inna Chemeris and Inna Sakhnevych authored the first textbooks on media education for journalism students and oil and gas engineers (Saxnevych 2011, 118; Chemerys 2005, 140).

The time has come to create special courses in media education for certain specialities. Such an experimental special course was once successfully implemented at the Department of Publishing and Editing at the National Technical University of Ukraine. This practice has led to the realisation that higher education should not just be about media education, but about professionally oriented education, i.e. education that is aimed at students of a particular speciality. Today, practitioners have already developed and offered a number of such special courses for future specialists in healthcare, oil and gas engineering, law, and journalism (Biletsky, Onkovych. & Yanyshyn 2019, 110-114; Adamia, Biletskyi, Onkovych & Onkovych 2023, 148-164).

The purpose of the new course presented in this article is to form the media and cultural competence of future engineering professionals in the applied discipline of "Environmental Safety".

THE SPECIAL COURSE "PROFESSIONALLY ORIENTED MEDIA EDUCATION IN THE DISCIPLINE "ENVIRONMENTAL SAFETY" FOR FUTURE EMPLOYEES OF ENGINEERING SPECIALITIES".

# THEMATIC PLAN

Theme1 Introduction: subject, purpose and objectives of media education	Terminology of media and media education. Concepts of "media culture", "media education", "media literacy", "media pedagogy", "media product". "media psychology", "media didactics". Key concepts of media education. Theories of media education.
Theme 2	Development of professional competence through media education. "Old", "new" and "contemporary" media. A brief overview of the development of the
Fundamentals of	press, radio, television, cinema, video, and the Internet.
media	proces, runnes, voic (122011, vincinus, 12000), unu viic 120011000
competence.	
Theme 3	Ecology (Applied Ecology) in periodicals, encyclopaedic dictionaries, reference
Press didactics.	books, educational literature. Sources, components, prospects. Publishing
	activities of educational, scientific and publishing institutions in applied
	ecology: a media education perspective.
Theme 4	Media didactics and its components (press didactics, film didactics, radio
Media didactics and its	didactics, television didactics, Internet didactics). Internet didactics and its components (video didactics, site didactics, blog didactics, webinar didactics),

etc.
cic.
Media education is a means of developing critical thinking as one of the professional competences in the search for new ways to solve scientific and technical problems. Educational and scientific films about ecology and environmental safety in various fields of engineering - through the critical thinking of a future specialist.
Articles on environmental safety in industry and related topics in the Ukrainian and English sectors of Wikipedia.
Sites and blogs of environmental and applied orientation in the social network and their media education function.
Professional-oriented media education with the component "Environmental
safety". The role of webinars of environmental and applied orientation in the professional development of a future specialist in engineering.
Sectoral databases on environmental disasters, their systematic analysis in order
to ensure environmental safety of modern technologies.
Defence of abstracts on the course topic (credit class).

The presented special course is focused on the needs of future employees of engineering specialities. Let us consider an example of the use of media education methods and tools in teaching the discipline "Environmental Safety in the Oil and Gas Industry", which is taught at the Department of Oil, Gas and Condensate Production of the National Technical University "Kharkiv Polytechnic Institute".

In addition to the usual support - textbooks, methodological material, scientific articles and monographs, etc. (Bilec"kyj 2021, 175; Sokur 2020, 238), the following Internet resources are actively used in teaching the discipline:

1. *Repository XIII* (Adamia, Biletskyi, Onkovych & Onkovych 2023, 148-164; Kirkpatrick & Lee 1997, 235-250):

http://repository.kpi.kharkov.ua/handle/KhPI-Press/54002

Wikipedia resources: Portals "Nature", "Technology", "Science"

B0 %D1%81%D1%82%D0%BE%D1%80%D1%96%D0%BD%D0%BA%D0%B0

# Specially created Blogs (Blogodidactics):

Education in Oil and Gas Engineering and Technology

(https://www.facebook.com/groups/145315129579851),

"Oil and Gas Education (https://www.facebook.com/groups/86649553505940).

# Websites (Site didactics):

Ukrainian oil. How is fuel created? | About Nadra

https://www.youtube.com/watch?v=3cjNcniEwXM&ab\_channel=%D0%9D%D0%90%D0%94%D0%9F%D0%A3

A large number of websites on the most large-scale accidents at oil and gas production and oil and gas transportation facilities, for example:

Category: Accidents in the oil and gas industry: Oil and gas blowout, Griffin (mining), Darwaza (gas crater), Sylhet (field), Chhatak (gas field); Offshore drilling rig disasters and accidents

https://uk.wikipedia.org/wiki/%D0%9A%D0%B0%D1%82%D0%B5%D0%B3%D0%BE%D1%80%D1%96%D1%8F:%D0%90%D0%B2%D0%B0%D1%80%D1%96%D1%97\_%D1%83\_%D0%BD%D0%B0%D1%84%D1%82%D0%BE%D0%B3%D0%B0%D0%B7%D0%BE%D0%B2%D1%96%D0%B9\_%D0%BF%D1%80%D0%BE%D0%BC%D0%B8%D1%81%D0%BB%D0%BE%D0%BE%D0%B2%D0%BE%D0%BE%D0%BB%D0%BE%D0%BD%D0%BE%D0%BD%D0%BE%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D0%BD%D

At the same time, professional topics in applied ecology need to be better represented in the Ukrainian webinar and blog space, and this is a promising area for the entire national professional community to make efforts.

The lectures of the special course "PROFESSIONALLY ORIENTED MEDIA EDUCATION IN THE DISCIPLINE "ENVIRONMENTAL SAFETY" FOR FUTURE ENGINEERING SPECIALISTS" consistently address the tasks of acquiring knowledge in the field of media education, its history, theories, technologies, information culture and skills of applying this knowledge in practice. Practical classes are aimed at consolidating the knowledge acquired during the lecture course in the speciality and orientate students to further independent work on the course topics, to use professionally oriented sources throughout their lives.

The result of professional training of a future specialist with the use of media education technologies is not only professional education, competence and mastery in a specialised field as components of professional culture, but also media awareness, media competence and media literacy. These constituent elements of media culture are the result of media education, which improves the quality of professional knowledge not only for students in the process of professional training, but also for professionals throughout their lives. Media culture should be seen as a necessary element of professional culture.

## **CONCLUSIONS**

1. The result of professional training of a future specialist with the use of media education technologies is not only professional education, competence and skills in a professional field as components of professional culture, but also media awareness, media competence and media literacy. These constituent elements of media culture are the result of media education, which

improves the quality of professional knowledge not only for students in the process of professional training, but also for professionals throughout their lives. Media culture should be seen as a necessary element of professional culture.

- 2. Professionally oriented specialised courses in various fields of study offer different technologies for developing the professional media competence of future specialists. On the one hand, their media didactic structure is common to all types, and on the other hand, the content of special courses corresponds to the specific speciality of students. Professional knowledge is represented in different sections of the course by specific "genres". This is illustrated in this article on the example of the special course "PROFESSIONALLY ORIENTED MEDIA EDUCATION IN THE DISCIPLINE "ENVIRONMENTAL SAFETY" FOR FUTURE ENGINEERING PROFESSIONALS" and shows that the introduction of media education into professional training is an urgent task for higher education pedagogy on the way to building a single European educational space. In this regard, it is time to create special courses in media education for certain engineering specialities.
- 3. The thematic plan of the special course "PROFESSIONALLY ORIENTED MEDIA EDUCATION IN THE DISCIPLINE "ENVIRONMENTAL SAFETY" FOR FUTURE ENGINEERING SPECIALISTS" was developed, which aims to form the media cultural competence of a future employee of engineering specialties in the applied discipline "Environmental Safety". It can be easily transformed into similar special courses for students of other fields of study.

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