



- Заснований у 2013 році -

Науковий журнал
Фізико-
Математична
Освіта

Scientific journal
Physical &
Mathematical
Education

ISSN 2413-158X (Online)

ISSN 2413-1571 (Print)

Dear colleagues!

The scientific journal "Physical and Mathematical Education" is included in the "List of Scientific Professional Editions of Ukraine" (Order of the Ministry of Education and Science of Ukraine No. 1412, December 18, 2018). The scientific edition is assigned the Category "B" in the field of pedagogical sciences (13.00.02- theory and methods of teaching physics, mathematics, and computer science), in specialties - 011, 014, 015.

Journal "Physical and Mathematical Education" is issued 3-4 times a year and publishes scientific articles that describe and (or) solved scientific-methodical and practical problems in the following areas:

1. *Actual problems of mathematics and methods of teaching mathematics*
2. *Actual problems of physics and methods of teaching physics*
3. *Computer sciences and methods of teaching them*
4. *Information technology in education*
5. *Theory and methodology of professional education*
6. *Secondary education*
7. *Educational, pedagogical sciences*

In scientific articles authors may submit material that has not been published before, according to the following structure: problem statement.

The scientific journal "Physical and Mathematical Education" is published in printed and electronic form

Indexing

The scientific journal "Physical and Mathematical Education" is indexed by **Google Academy** and **Index Copernicus**

Author fees

1. On-line publication costs 550 UAH.

The author receives a log file in pdf format and a link to his article on the journal site with the assignment of DOI.

2. Printed publication costs 700 UAH.

The author receives a printed version of the journal and its pdf-version with DOI.

The requisites for payment are sent to the author by e-mail after the article acceptance. For each accepted article, one printed copy is guaranteed for no additional payment.

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The Editors do not charge any foreign author fee for manuscripts submitting, reviewing and e-publication.

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issue 1 - articles should be submitted before **March 1**;

issue 2 - articles should be submitted until **June 1**;

issue 3 - articles should be submitted before **September 1**;

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In case of receiving positive reviews from the experts of the editorial board, authors will be informed the article acceptance and the expected date of publication.

The editorial board reserves the right to submit materials for additional review, reject articles, which do not meet the requirements or scope of the journal, to transfer part of the articles to the next issue of the publication.

Contacts

Makarenko Sumy State Pedagogical University
40002, Ukraine, Sumy, Romenska st., 87

Editor-in-Chief: Olena V. Semenikhina

Phone: +38(0542)-68-59-72

Url: <http://fmo-journal.fizmatsspu.sumy.ua>

E-mail: fmo-journal@fizmatsspu.sumy.ua



Article Types

Full Research Articles

The submissions in this category are the results of the research work performed with the scientific originality, and describe new approaches, methods, techniques, technologies, etc., and confirmed by empirical or other estimates, in particular statistical ones. Results previously published at conferences may be submitted as substantially extended versions.

Page limit: 5-6 journal pages.

Methodical Articles

The submissions in this category describes effective techniques, technologies, approaches, teaching means, etc. that are not new, but confirmed by own experience. In this case, it is mandatory to indicate the basis for the implementation of the methodology (technology, method) and empirical / statistical assessments of its effectiveness.

Page limit: 5-6 journal pages.

Survey Articles

The submissions in this category are not original research work, but all-round characterize the state of research of the issue within a certain problem field. The purpose of this article is to generalize the development of this problem and a brief description of the available results. An important issue for articles in this category is suitability as introductory text for researchers (PhD students, doctoral students, or practitioners) to get started on the covered topic.

Page limit: 25 journal pages

Book Review (review of books, monographs, textbooks, manuals, etc.)

The submissions in this category are reviews of books (monographs, manuals, etc.), which necessarily contain information about the author, a screen of the title page of the publication, a brief description of the structure and main ideas of the publication.

Page limit: 1 journal page

Manuscript Requirements

Manuscript languages: Ukrainian, Russian, English

1. The article file should be submitted in *.doc/*.docx format.

The volume of the article is calculated along with a references and abstracts.

Page – A4 (210x297 mm), page margins: all margins set to 25mm, without page header, page footer and page numbering.

Calibri format, 9 pt font size,

Indent the first line of each paragraph 10mm, 1 line spacing.

2. Formatting some objects. All illustrations, schemas, program codes and tables should be located immediately after mentioning in the text (not at the end of the article).

Formulas and some mathematical symbols and letters to denote values must be typed in the MS Equation editor, without framing and folding. Align center, numbering - in parentheses, right.

The figures must be signed, numbered, grouped, clear, aligned center.

Tables are called and numbered.

For more details see the example or template of an article

(<http://fmo-journal.fizmatsspu.sumy.ua/index/0-10>).

Manuscript Structure

1st row: UDK (*left*)

2d row: author's surname and initials (*bold, right*)

3d row: affiliation, country (*italics, right*)

4th row: e-mail (*italics, right*)

5th row: ORCID (*italics, right*)

6th row: blank line

7th row: Title (*capital letters, bold, in the middle*)

8th row: blank line

Abstract in the language of the article (*1900-2000 characters with spaces included*) containing the elements:
Formulation of the problem. This block contains the formation of a specific solving question, or the advanced hypothesis.

Materials and methods. It is necessary to describe the materials, the methods by which the purpose was solved, as well as the experimental basis (sample size, estimation methods, etc).

Results. The author have to list the main results that have been obtained and clarify the approach to their justification based on statistical analysis. There is no need to draw conclusions.

Conclusions. Key conclusions are to be provided, and a general interpretation of the results and / or specific recommendations for future research can be added.

Keywords (5-7).

Then the empty line and the text of the article with the following sections:

1. INTRODUCTION (*obligatory section*)

The statement of the problem, the relevance of the research and the purpose of the article are indicated.

2. THEORETICAL BASES OF THE RESEARCH (*optional*)

3. METHODS OF THE RESEARCH (*obligatory section*)

4. RESULTS OF RESEARCH (*obligatory section*)

5. DISCUSSION (*obligatory section*)

6. CONCLUSIONS AND PERSPECTIVES FOR A FURTHER RESEARCH (*obligatory section*)

Then – References (in the language of the original) and References (transliterated) in alphabetical order.

Then an abstract in another language (if the article is in Ukrainian or Russian, then the abstract in English, if the article is in English, then an abstract in Ukrainian) in the following order:

Title of the article (*capital letters, bold, in the middle*)

Surname and initials of the author (*italics, in the middle*)

Affiliation, country (*italics, middle*)

Abstract (*1900-2000 characters including spaces*) is structured as described above.

Keywords (5-7)

References

References is formed in alphabetical order in accordance with the rules of the standard DSTU 8302: 2015 "Bibliographic link. General Terms and Rules of Composition" (Ukraine). If available, the DOI is added to the sources.

References in the text are written in parentheses with the author and year. For example, "text ... text (Omelyan, 2010). Text ... text (Afanasenko, 2016; Ivanenko & Petrenko, 2009; Panenko, 2018). "

References are written in Latin, according to the APA Style (American Psychological Association Style) (http://www.tandf.co.uk/journals/authors/style/reference/tf_APA.pdf).

Transliteration for Cyrillic quotes is duplicated by the English translation of the article title, conference title and the official title of the publication according to ISSN number. For transliteration online services <http://ukrlit.org/translitratsiia> (for Ukrainian) and <http://translit.cc> (for Russian) are recommended. After each reference, the source language [in Ukrainian] or [in Russian] should be indicated in the parentheses.

An example of the References see on <https://bit.ly/2MmLccC>

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Each article sent is checked on originality. Plagiarism in any form, including unformed citations, rephrasing or assigning rights to the results of others' research, is unethical and unacceptable.

The originality of the manuscript should be at least 70%.

The authors of the articles are responsible for the accuracy of the information provided (accuracy of data in the article, quotes, statistical material, etc.) and for violation of intellectual property rights of other persons. Opinions expressed by the authors may not coincide with the point of view of the editorial board.

FORMATTING OF INDIVIDUAL OBJECTS

The material should be presented in a concise manner, without repeated data of the tables and figures in the text. It's inappropriate to use such formatting elements as "break a section from a new page" and page footers.

Figures

Illustrations (photos, drawings, diagrams, graphs, maps, screenshots of the site) are denoted by the word "Fig.", numbered consecutively with Arabic numerals, aligned in the center. The names of the illustrations are placed after their numbers.

The name of the drawing is written with a capital letter and must be placed in the middle of the sheet under the illustration, italics, Calibri 9pt. Illustrations in the article can be black and white or colored and have a single style.

Before and after the drawing, it should be left one blank line.

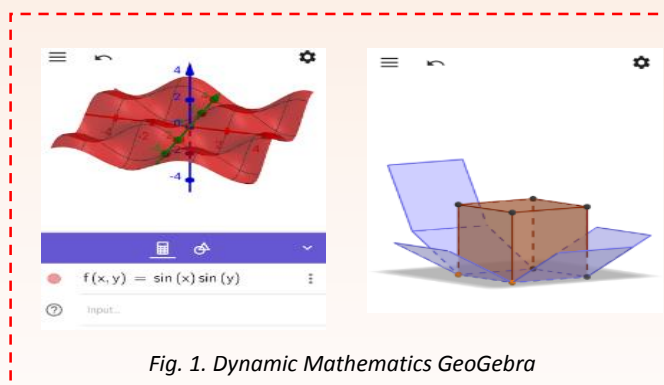


Fig. 1. Dynamic Mathematics GeoGebra

Tables

Tables are numbered, centered, without spaces. The word «Table 1.», italic, right, Calibri 9pt. Format of table name: centered, bold, position – above the table. After the table it is necessary to leave a blank line.

Table 1

Basic physical quantities and units of their measurement				
ФІЗИЧНА ВЕЛИЧИНА	ОДИНИЦЯ			
	Найменування	ПОЗНАЧЕННЯ		
		українське	міжнародне	символ
Довжина	Метр	м	m	L
Маса	Кілограм	кг	kg	m
Час	Секунда	с	s	t
Сила електричного струму	ампер	A	A	I
Термодинамічна температура	кельвін	K	K	T
Кількість речовини	моль	моль	mol	N
Сила світла	кандела	кд	cd	J

Lists

Lists are issued as follows:

- Numbered – "1." "1)", «а»;
- Labeled – « – ».

Formulas

Equations and mathematical symbols and letters which denote the variables in the text should be typed in MS Equation, without frame and fill. Centered, numbered – in parentheses to the right.

$$f(x) = a_0 + \sum_{n=1}^{\infty} \left(a_n \cos \frac{n\pi x}{L} + b_n \sin \frac{n\pi x}{L} \right) \quad (1)$$

ARTICLE EXAMPLE

UDK (<http://www.udcc.org/udccsummary/php/index.php?lang=uk>)

Author's surname and initials

Affiliation of work or study

e-mail

ORCID (<https://orcid.org/>)

TITLE OF THE ARTICLE

Abstract. *The content of the abstract should describe briefly and informatively the main ideas and the obtained results.*

Formulation of the problem. *This block contains the formulation of a specific solving question, or the advanced hypothesis. It is necessary to describe clearly the logical justification for the research.*

Materials and methods. *It is necessary to describe the materials, the methods by which the purpose was solved, as well as the experimental basis (sample size, estimation methods, etc).*

Results. *The author have to list the main results that have been obtained and clarify the approach to their justification based on statistical analysis. There is no need to draw conclusions.*

Conclusions. *Key conclusions are to be provided, and a general interpretation of the results and / or specific recommendations for future research can be added.*

1. INTRODUCTION *(obligatory section)*

Formulation of the problem. This part of the article describes the problem in general and its connection with important scientific or practical tasks.

Analysis of actual research. In this part, an analysis of the available work on this problem is carried out and highlighted the previously unresolved issues to which the article is devoted.

Please note that:

- references in the text are written in parentheses with the author and year. For example, (Omelyan, 2010);

- Several sources are separated by a semicolon. For example, (Afanasenko, 2016; Ivanenko & Petrenko, 2009).

The purpose of the article. Formulating the goals of the article (statement of the task). For example, «The purpose of the article is to highlight the "cloud computing approach", which enables you to build a service-oriented learning system on the Moodle platform efficiently and with minimal cost. ... ».

2. THEORETICAL BASES OF THE RESEARCH *(optional)*

In this section, the fundamental theories that underlie the study are pointed out.

3. METHODS OF THE RESEARCH *(obligatory section)*

The description of research methods can not be abstract and should include a list of those used to obtain the described results and to achieve the purpose of the article. It may also include details of the research methodology, its stages, etc.

4. RESULTS OF RESEARCH *(obligatory section)*

The author have to list the main results that have been obtained and clarify the approach to their justification based on statistical analysis.

5. DISCUSSION *(obligatory section)*

This part of the manuscript contains an interpretation of the results obtained in various contexts of recommendations for the implementation of approaches, techniques, special cases, etc.

6. CONCLUSIONS AND PERSPECTIVES FOR A FURTHER RESEARCH *(obligatory section)*

Key conclusions are to be provided, and a general interpretation of the results and / or specific recommendations for future research can be added.

References

1. Baranovska, V.M. (2014). Sutnist poniattia «systema informatychnykh kompetentnosti» [The essence of the notion of «system of informational competencies»]. *Scientific journal of NPU named after M.Drahomanov*, 14(21), 48–59. [in Ukrainian].

2. ...

НАЗВА СТАТТІ

Прізвище та Ініціали

Місце роботи або навчання, країна

Анотація. *Зміст анотації має стисло й інформативно описати основні ідеї та отримані результати.*

Формулювання проблеми. *Цей блок містить формулювання конкретного питання, що вирішується, або висунутої гіпотези. Слід чітко обґрунтувати проведення дослідження.*

Матеріали і методи. *Потрібно описати матеріали, методи, завдяки яким була вирішена поставлена проблема, а також експериментальну базу (обсяг вибірки, методи оцінки тощо).*

Результати. *Автору слід перерахувати основні результати, які були отримані, та уточнити підхід до їх обґрунтування за статистичним аналізом. Не потрібно приводити висновки.*

Висновки. *Необхідно надати ключові висновки. Можна додати загальне тлумачення результатів та/або конкретних рекомендацій для майбутніх досліджень.*

Ключові слова: *5-7 ключових слів.*