



BUKOVINIAN STATE
MEDICAL UNIVERSITY

БУКОВИНСЬКИЙ ДЕРЖАВНИЙ
МЕДИЧНИЙ УНІВЕРСИТЕТ



ȘTEFAN CEL MARE
UNIVERSITY
OF SUCEAVA

СУЧАВСЬКИЙ УНІВЕРСИТЕТ
ІМ. ШТЕФАНА ЧЕЛ МАРЕ

АКТУАЛЬНІ ПИТАННЯ СУСПІЛЬНИХ НАУК ТА ІСТОРІЇ МЕДИЦИНИ

AKTUALINI PYTANNIA SUSPILINIH
NAUK TA ISTORII MEDITSINI
(APSNIM)

CURRENT ISSUES OF SOCIAL
STUDIES AND HISTORY OF
MEDICINE

АКТУАЛЬНЫЕ ВОПРОСЫ
ОБЩЕСТВЕННЫХ НАУК
И ИСТОРИИ МЕДИЦИНЫ

ENJEUX ACTUELS DES SCIENCES
SOCIALES ET DE L'HISTOIRE DE
LA MEDECINE

Спільний українсько-румунський науковий журнал
Joint Ukrainian-Romanian scientific journal

2021, 2(30)

*Журнал засновано в 2013 р.
Перереєстровано 27.07.2015 р. у Міністерстві
юстиції України (Свід. № 21495-11295ПП – Сер. КВ)*

*Journal started publishing in 2013 year.
Re-registered in the Ministry of Justice of Ukraine
27.07.2015 p (Cert.of registr. № 21495-11295PP – Ser. KB)*

*Журнал включено до Категорії "Б" Переліку
наукових фахових видань України з історичних
та філологічних наук (Наказ МОН України № 409
від 17.03.2020р.).*

*Journal is on the List of Scientific Professional publication
of the Ministry of Education and Science of Ukraine
Category «B», entitled to publish main results of
dissertations in different fields of Historical sciences and
Philological sciences (order № 409 of 17.03.2020)*

Honorary editor: Dr. of Medicine, Prof. **Taras Boychuk** (Bukovinian State Medical University)

Editors-in-Chief: Dr. of History, Prof. **Antoniuy Moysey** (Bukovinian State Medical University)
Dr. of History, Prof. **Stefan Purici** (Ștefan cel Mare University of Suceava)

Executive Editors: Ph.D., Assoc. Prof. **Antonina Anistratenko**, responsible for the electronic version of the journal
Ph.D., Assoc. Prof. **Yulia Rusnak** (Bukovinian State Medical University)
Ph.D., Lecturer **Tetyana Nykyforuk** (Bukovinian State Medical University)
Ph.D., Lecturer **Harieta Mareci Sabol** (Ștefan cel Mare University of Suceava)

Editors Assistants: Ph.D., Associate Prof. **Inha Tymofijchuk** (Bukovinian State Medical University)
Ph.D., Lecturer **Vasile M. Demciuc** (Ștefan cel Mare University of Suceava)

Executive secretaries: Lecturer **Iryna Kaizer**, Lecturer **Lidia Vylka**, Lecturer **Uliana Kemin**
Responsible for the Bibliographic description of the references: **Svitlana Tulevska**

INDEXING: Index Copernicus – 73,78 (2016) | Infobase Index – 2,8 (2016) | MIAR – 2,8 (2016) | SRJIF – 3,98 (2017) | JICIndex – 0,110 (2017)

Journal was registered in the international scientometric and bibliographical database Index Copernicus, Directory of Open Access Journals (DOAJ), Ulrichs Web, Erih Plus, Scientific Indexing Services, Index of Turkish Education, Infobase Index, OAJI, World Cat, DRJI, Sherpa/Romeo, MIAR, Journal Factor (JF), Root indexing, Science Research Journal Impact Factor was published in database: Google Scholar, SCIARY (World Wide Science Educational Library), Scientific periodicals of Ukraine, Central and Eastern European Online Library (Germany).

EDITORIAL BOARD:

SOCIAL SCIENCES

History: Prof. *Onoriu Colăcel*, Dr. of History, Ștefan cel Mare University of Suceava (Romania); Assoc. Prof., *Serhiy Dobrshanskyi*, Ph. D., Yuriy Fedkovych Chernivtsi National University (Ukraine); Assoc. Prof. *Gennadii Kazakevych*, Dr. of History, Taras Shevchenko Kyiv National University (Ukraine); Prof. *Michel Kerautret*, Dr. of History, Ecole des Hautes études en sciences sociales (Paris, France); Prof. *Zenon Kohut*, Dr. of History, Alberta University (Edmonton, Canada); Prof. *Anatoliy Kotsur*, Dr. of History, Taras Shevchenko Kyiv National University (Ukraine); Prof. *Oleksandr Kurochkin*, Dr. of History, M. Rylskyi Institute of Art, Folklore and Ethnology, Academy of Sciences (Kyiv, Ukraine); Chief Research Worker *Elisaveta Kvilincova*, Dr. of History, Institute of Cultural Heritage, Academy of Sciences (Chisinau, R. Moldova); Prof. *Yuri Makar*, Dr. of History, Academician of the Ukrainian Academy of History, Yuriy Fedkovych Chernivtsi National University (Ukraine); Senior Research Associate *Paul Meerts*, Dr. of History, Institute of International Relations Clingendael (The Hague, Netherlands); Prof. *Olimpia Mitric*, Dr. of History, Ștefan cel Mare University of Suceava (Romania); Prof. *Gheorghe Onișoru*, Dr. of History, Ștefan cel Mare University of Suceava (Romania); Assoc. Prof. *Nataliya Petrova*, Ph. D., I. I. Mechnikov National University of Odesa (Ukraine); Assoc. Prof. *Florin Pintescu*, Dr. of History, Ștefan cel Mare University of Suceava (Romania); Acad. *Stepan Pavliuk*, Dr. of History, Director of the Institute of Ethnology, Academy of Sciences (Ukraine); Acad. *Anna Skrypnyk*, Dr. of History, Director of the Institute of Art Studies, Folklore and Ethnology, Academy of Sciences (Kyiv, Ukraine); Prof. *Andrzej Wawryniuk*, Dr. of History, Państwowa Wyższa Szkoła Zawodowa w Cholmie (Poland);

Philologie: Prof. *Bertrand Badiou*, Dr. of Philology, Ecole normale supérieure (Paris, France); Prof. *Piotr Borek*, Dr. of Philology, Head of the Polish Philology Institute Krakiv Pedagogical University (Poland); Assoc. Prof. *Carmen Dărăbuș*, Dr. of Philology, Kliment Ohridski University of Sofia (Bulgaria); Prof. *Mircea A. Diaconu*, Dr. of Philology, Ștefan cel Mare University of Suceava (Romania); Assoc. Prof. *Evelina-Mezalina Graur*, Dr. of Philology, Ștefan cel Mare University of Suceava (Romania); Prof. *Adam Falowski*, Dr. of Philology, Head of the East Slavic Philology Institute Jagiellonian University (Poland); Prof. *Roma Franko*, Dr. Of Philology, University of Saskatchewan (Canada); Assoc. Prof. *Anastasiya Lepetiukha*, Kharkiv national pedagogical university named after H. Skovoroda (Ukraine); Assoc. Prof. *Simona-Aida Manolache*, Dr. of Philology, Ștefan cel Mare University of Suceava (Romania); Chief Research Worker *Anna-Maria Sorescu-Marinkovich*, Dr. of Philology, Balkan Institute at Serbian Academy of Sciences and Art (Belgrad, Serbia); Prof. *Hanna Martynova*, Dr. of Philology, Bohdan Chmelnytskyi Cherkasy National University (Ukraine); Prof. *Ovidiu Morar*, Dr. of Philology, Ștefan cel Mare University of Suceava (Romania); Prof. *Mihaela Violeta Munteanu*, Dr. of Philology, Technical University of Cluj-Napoca (Romania); Prof. *Rodica-Măriora Nagy*, Dr. of Filology, Ștefan cel Mare University of Suceava (Romania); Prof. *Felix-Narcis Nikolau*, Dr. Of Philology, Lunds universitet (Sweden); Prof. *Antoaneta Olteanu*, Dr. of Philology, Bucharest University (Romania); Assoc. Prof. *Oleksandr Rak*, Ph. D. of Philology, Bukovinian State Medical University (Ukraine); Prof. *Nataliya Rusnak*, Dr. of Philology, Yuriy Fedkovych Chernivtsi National University (Ukraine); Dr. of Filology, Prof. *Svitlana Shabat-Savka*, Ph. D. of Philology, Yuriy Fedkovych Chernivtsi National University (Ukraine);

Philosophy: Prof. *Sorin Tudor Maxim*, Dr. of Philosophy, Ștefan cel Mare University of Suceava (Romania); Prof. *Diego Sanchez Mecka*, Dr. of Philosophy, National University of Distance Education (Madrid, Spain); Assoc. Prof. *George Neamțu*, Dr. of Philosophy, Ștefan cel Mare University of Suceava (Romania); Assoc. Prof. *Bogdan Popoveniuc*, Dr. of Philosophy, Ștefan cel Mare University of Suceava (Romania); Assoc. Prof. *Nina Zoriy*, Ph. D. of Philosophy, Bukovinian State Medical University (Ukraine).

HISTORY OF MEDICINE:

Assoc. Prof. *Carmen Cornelia Bălan*, Dr. of Psychology, Ștefan cel Mare University of Suceava (Romania); Dr. med. Dipl.-Psych, MBA, *Gerhardt Dammann*, Chief of Psychiatrische Klinik Münsterlingen and the psychiatric services Thurgau (Switzerland); Prof. *Alexander Fediv*, Dr. of Medicine, Bukovinian State Medical University (Ukraine); Prof. *Oleksandr Ivashiuk*, Dr. of Medicine, Bukovinian State Medical University (Ukraine); Prof. *Alfred Prits*, Dr. of Psychology, President of World Psychology Union Head of Psychotherapy and Psychoanalysis Institute in Vienna (Austria); Assoc. Prof. *Nadia Laura Serdenciuc*, Dr. of Educational Sciences, Ștefan cel Mare University of Suceava (Romania); Prof. *Viktor Tashchuk*, Dr. of Medicine, Bukovinian State Medical University (Ukraine); Prof. *Dmytro Tyntyuk*, Dr. of Medicine, Chisinau State University of Medicine and Pharmacy N. Testemitsanu (R. Moldova); Prof. *Bohdan Vasylevskiy*, Dr. of Medicine, Chief of Psychosomatik Institute (Warsaw, Poland).

Актуальні питання суспільних наук та історії медицини. Спільний українсько-румунський науковий журнал. Серія "Історичні науки" || Current issues of Social studies and History of Medicine. Joint Ukrainian-Romanian scientific journal. Series "Historical science"/ Редколегія: А. Мойсей, Ш. Пуріч. Чернівці-Сучава: БДМУ. 2021. № 2 (30). 120 с.

ISSN: 2311-9896; EISSN 2411-6181

The actual problems of world history, history of Ukraine, history of religion, ethnogenesis and traditional culture of peoples, archeology, philosophy, linguistics, literature and history of medicine are investigated in the journal. The journal is the international edition according to the sphere of extension and geography of the authors.

ББК 60я53+5г.я43

The journal is published in paper and electronic version with the resolution of the academic council of Bukovinian State Medical University (Decision № 9 . Date: 13.05.2021).

The authors are responsible for the selection, accuracy of given information, citations, proper names, geographical names and other data.

Publishing: 2-4 issues a year. Languages: Ukrainian, Russian, English, French.

Address: Ukraine, 58000, Chernivtsi, Heroiv Maidanu str., 3, Department of Social Sciences and Ukrainian Studies.
Tel.: (0372) 520871. **E-mail:** snim@bsmu.edu.ua; society@bsmu.edu.ua

The electronic version of the journal is available on the Web sites: <http://apsnim.bsmu.edu.ua>; <http://doaj.org> (DOAJ); <http://www.irbis-nbu.gov.ua> (National V. Vernadskij library web-site); <http://e-apsnim.bsmu.edu.ua> (OJS); <https://journals.indexcopernicus.com/representative/issue/list> (Copernicus ICI).

НАВИЧКИ ДИСТАНЦІЙНОГО ВИКЛАДАННЯ ФІЗІОЛОГІЇ СТУДЕНТАМ БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ

Інга ТИМОФІЙЧУК, Світлана СЕМЕНЕНКО,

Буковинський державний медичний університет, Чернівці (Україна),
inga.tymofijchuk@bsmu.edu.ua; semenenko.svitlana@bsmu.edu.ua;

SKILLS OF DISTANCE TEACHING OF PHYSIOLOGY TO STUDENTS OF BUKOVINA STATE MEDICAL UNIVERSITY

Inga TYMOFIYCHUK, Svitlana SEMENENKO,

Bukovinian State Medical University, Chernivtsi (Ukraine),
ORCID 0000-0002-6124-1938; Researcher ID I-1201-2016
ORCID 0000-0003-2617-9697;

Тимофійчук Інга, Семененко Светлана. Навыки дистанционного преподавания физиологии студентам Буковинского государственного медицинского университета. Целью нашего исследования стало сделать промежуточные выводы о недостатках и преимуществах дистанционной формы обучения при изучении физиологии студентами 2 курса БДМУ. **Новизна статьи.** Кафедра физиологии БДМУ за время преподавания накопила некоторый опыт дистанционной формы обучения. Коллектив кафедры в ходе преподавания, усовершенствовал компьютерные навыки, были обновлены и улучшены серверы Moodle. **Методология статьи** включает сравнительный и аналитический методы оценки достижений и проблем дистанционного преподавания предмета “Физиология” студентам БГМУ. **Выводы.** Дистанционная форма обучения сокращает время обучения благодаря скорости коммуникации преподавателя и студента. Доступ к медицинской информации значительно расширен и есть возможность использования всех форм обучения, в том числе самостоятельной работы в электронной библиотеке. В сельских районах электронная медицинская библиотека может стать одним из наиболее эффективных путей использования информационного прогресса в клинической медицине. Своевременное и оперативное внедрение дистанционной формы обучения в медицинском университете позволило заинтересовать студентов и в итоге развить дистанционный формат обучения в единую информационно-образовательную среду университета, расширить электронную учебно-методическую базу университета и сохранить прежний образовательный потенциал. Недостатком дистанционного обучения является невозможность приобретения и отработки мануальных навыков и выполнения различных врачебных манипуляций под контролем преподавателя, что является основой качественной подготовки специалистов в медицинских ВУЗах.

Ключевые слова: дистанционное образование, преподавание студентам медицинских вузов, преподавание физиологии, ресурс MOODLE.

Introduction. The use of information technology in the pedagogical process has increased, especially in the last decade. The personal computer and the Internet have become integral components of professional education. The use of telecommunications and network technologies allows teaching in cases where teacher and student are separated by a significant geographic distance¹. Modern computer programs make it possible to ensure the transfer of knowledge and access to a variety of educational information, and new technologies, such as interactive electronic teaching aids, multimedia content, the Internet, contribute to more active involvement of students in the learning process. The interactive capabilities of information delivery systems make it possible to establish and even stimulate feedback, provide dialogue and ongoing support that are impossible in most traditional learning systems. Distance learning has not spared medicine either. For more than 10 years, the “Moodle” distance learning server has been operating at the Bukovina State Medical University, which has been constantly being improved over the years of its existence. Students, first of all, try to get information in

the Moodle. The server contains: methodological materials for preparation, lecture material, textbooks, timetables, reference books for students, information about practicing, the results of practicing missed lessons. It is Moodle that works for students as an interactive whiteboard that is available 24 hours a day. In the conditions of quarantine and the transition to distance learning, using Google Meeting applications, the information posted on the server was very timely².

But medical education is one of the few in the world that cannot be obtained by correspondence. At the beginning of the introduction of distance learning, this process was considered as a temporary measure, and the participants in the educational process, as every year, were ready for a short quarantine. Over time, according to reports from WHO, it became clear that the COVID 19 pandemic would last indefinitely. But how to continue the educational process in the context of the COVID 19 pandemic, when mankind has been challenged. To suspend the educational process, to put thousands of students in front of a choice - the loss of invaluable years. Few will be able to give an

¹ Anysymov A.M. Rabota v sisteme dystantsyonnoho obuchenya Moodle: Uchebnoe posobyе, 2-e yzd. yspr. y dopoln, Kharkov, KhNAHKh, 2009, 292 [in Russian].

² Kukhareno V.M. Rozvytok dystantsiinoho navchannia na suchasnomu etapi [Development of distance learning at the present stage. Scientific Bulletin of the National Academy of Statistics, Accounting and Auditing. Coll. Science wash], Naukovyi vistnyk Natsionalnoi akademii statystyky, obliku ta audytu. Zb. nauk. prats, N 2, 2012, P. 117 –121 [in Ukrainian].

answer to this difficult question, let alone take responsibility for making such fateful decisions³.

The use of modern information technologies makes it possible to transfer the learning process to a qualitatively higher level. As a result, traditional education is reorientated to a fundamentally new level, where the role of the student changes: he becomes an active participant in the educational process⁴.

Students of medical universities in the process of distance learning should acquire comprehensive technological knowledge necessary for future practice. However, the question arises: Is distance learning in medicine possible? Is it possible to ensure the development of clinical skills in a distance course without integrated face-to-face training? In any medical specialty, as opposed to the humanities, imaging plays a key role in acquiring the knowledge of a physician. It is impossible to imagine gaining knowledge of anatomy without working in a section, studying histology without working with microscope preparations, studying surgery without observing operations, etc⁵. You can read a description of the X-ray picture of pneumonia in a textbook many times, but not remember it. But it is enough to see the X-ray once and remember it for life. The purpose of our study was to draw intermediate conclusions about the disadvantages and advantages of distance learning in the study of physiology by students of the 2nd year of BDMU.

Rapidly changing events in the country and in the world as a whole make us more mobile and require quick adaptation skills. The Department of Physiology of the BDMU during the teaching period has accumulated some experience in distance learning. The staff of the department, in the course of teaching, improved their computer skills, the Moodle servers were updated and improved. Physiology is studied by students of a medical university in the 2nd year in the block of biomedical disciplines (theoretical). From this point of view, distance learning should not worsen the assimilation of the subject. Practical exercises were carried out in accordance with the methodological developments for teachers and included all types of work: theoretical survey, test control, the practical part included watching video files, presentations, virtual physiology programs were used. From the point of view of the survey, the distance form has a number of advantages – the survey is individual (the microphones of other students are turned off). Students can pass the test control outside the classroom, within the framework of independent work. This approach saves time that can be used to analyze situational problems. The practical part of the subject, it is here that discussions "for" and "against" can arise. It is physiology that is the

theoretical basis of medicine, which creates the basis for mastering clinical disciplines in senior courses, especially therapy. The subject contains a large volume of practical work, which is not possible to learn only with the help of virtual physiology. The first module, General Physiology, is studied by students in the fall semester and includes: physiology of excitable tissues, nervous system, endocrine glands, sensory systems. Many workshops were studied using the virtual physiology program, namely, the introduction of a microelectrode and the measurement of the resting potential and action potential, the conduction of excitation along the nerve fiber and the laws of conduction, the virtual administration of hormones and the observed effects. When studying the properties of the nervous system in practical classes (full-time), students studied tendon reflexes, and when studying sensory systems, they practically conducted a study of hearing acuity, visual acuity, visual fields with the help of equipment. In the conditions of the remote form, the development of such skills is reduced to watching video materials.

The second module of physiology, Physiology of the Visceral Systems, is devoted to the study of the functions of organs and systems. This is a block of material with a lot of practical work. Physiology of the cardiovascular system, where students are taught the skills of determining the boundaries of the heart, auscultation of heart sounds, recording an ECG and decoding. Respiratory physiology includes lung percussion, auscultation, pneumotachometry. When studying the section Physiology of digestion, practical work was carried out to study the properties of saliva, gastric juice, bile. Many of these works can be done independently after watching the training videos. But in this situation, that unique working moment is lost, which groups students into one team and develops their communication skills, which are necessary for a doctor, because his profession is working with people⁶.

Distance learning cannot be considered as a correspondence form of education. It differs from distance learning by a more convenient information delivery system and the use of new technologies in the learning process, which allows expanding the geography of course participants and also expanding the thematic range of courses taught without reducing their quality. Distance learning reduces learning time due to the speed of communication between teacher and student. Access to medical information has been significantly expanded and there is an opportunity to use all forms of education, including independent work in the electronic library. In rural areas, the electronic medical library can become one of the most effective ways to use information progress in clinical

³ Kukhareno V.N. *Praktykum dystantsyonnoho obuchenya* [Distance learning workshop], 2-e yzdanye, pod redaktsyei prof. Kukhareno V.N., Kyiv, Mylennyum, 2003, 196 p. [in Russian].

⁴ Khoruzhaia R.E., Kalynovskiy D.K., Tatarenko L.L. *Dystantsyonnoe obuchenye v vysshei medytsynskoi shkole* [Distance learning in higher medical school], *Ukraynskyi zhurnal teledytsyny y medytsynskoi telematyky* [Ukrainian Journal of Telemedicine and Medical Telematics], 2013, N 1, P. 217–220 [in Russian].

⁵ Lobatenko K.D., Savchenko M.V. *Model adaptivnoho kontroliu znan* (Informatsiini tekhnolohii: nauka, tekhnika, tekhnolohiia, osvita, zdorovia: Tezy dopovidei XXII mizhnarodnoi naukovo-praktychnoi konferentsii, Ch. III (15-17 zhovtnia 2014 r., Kharkiv), za red. prof. Tovazhnianskoho L.L., Kharkiv NTU "KhPP", 330 p.) [Model of adaptive knowledge control (Information technologies: science, engineering, technology, education, health: Abstracts of the XXII International scientific-practical conference, Part III (October 15-17, 2014, Kharkiv)], P. 71 [in Ukrainian].

⁶ *Medychna osvita u sviti ta v Ukraini* [Medical education in the world and in Ukraine], I.Ye. Bulakh, O.P. Volosovets, V.S. Moskalenko ta in., Kyiv : Knyha plus, 2005, 384 p. [in Ukrainian].

medicine⁷. Timely and prompt implementation of distance learning at a medical university made it possible to interest students and, as a result, develop a distance learning format into a unified information and educational environment of the university, expand the electronic educational and methodological base of the university and maintain the previous educational potential.

The disadvantage of distance learning is the impossibility of acquiring and practicing manual skills and performing various medical manipulations under the supervision of a teacher, which is the basis for high-quality training of specialists in medical universities.

Тимофійчук Інга, Семененко Світлана. Навички дистанційного викладання фізіології студентам Буковинського державного медичного університету. Використання інформаційних технологій в педагогічному процесі збільшилося, особливо, в останнє десятиліття. Сучасні комп'ютерні програми дозволяють забезпечити передачу знань і доступ до різноманітної навчальної інформації, а нові технології, такі як інтерактивні електронні навчальні посібники, мультимедійний контент, мережа Інтернет, сприяють більш активному залученню учнів до процесу навчання. Дистанційне навчання не обійшло стороною і медицину. **Мета статті** – розкрити досягнення і проблеми дистанційного викладання теоретичних дисциплін у Буковинському державному медичному університеті, що вже більше 10 років працює з сервером дистанційного навчання “Moodle”, який за роки свого існування постійно вдосконалюється. **Новизна статті** полягає в з’ясуванні причин популярності ресурсу в студентів, адже відомо, що студенти-медики, в першу чергу, намагаються отримати інформацію саме в Moodle. На сервері розміщені: методичні матеріали для підготовки, лекційний матеріал, підручники, календарні плани, довідники для студентів, інформація про відпрацювання, результати відпрацювань пропущених занять. **Методологія статті** включає порівняльний і аналітичний методи оцінки досягнень і проблем дистанційного викладання предмету «Фізіологія» студентам БДМУ. **Завданням** нашого дослідження стало зробити проміжні висновки про недоліки і переваги дистанційної форми навчання при вивченні фізіології студентами 2 курсу БДМУ. **Висновки.** Кафедра фізіології БДМУ за час викладання накопичила певний досвід дистанційної форми навчання. Колектив кафедри в ході викладання, удосконалив комп'ютерні навички, були оновлені та покращені сервери Moodle. Дистанційне форма навчання скорочує час навчання завдяки швидкості комунікації

викладача і студента. Доступ до медичної інформації значно розширено і є можливість використання всіх форм навчання, в тому числі самостійної роботи в електронній бібліотеці. У сільських районах електронна медична бібліотека може стати одним з найбільш ефективних шляхів використання інформаційного прогресу в клінічній медицині. Своєчасне і оперативне впровадження дистанційної форми навчання в медичному університеті дозволило зацікавити студентів і в підсумку розвинути дистанційний формат навчання в єдину інформаційно-освітнє середовище університету, розширити електронну навчально-методичну базу університету та зберегти колишній освітній потенціал. Недоліком дистанційного навчання є неможливість надбання та відпрацювання мануальних навичок і виконання різних лікарських маніпуляцій під контролем викладача, що є основою якісної підготовки фахівців в медичних ВНЗ.

Ключові слова: дистанційна освіта, викладання студентам медичних ВНЗ, викладання фізіології, ресурс MOODLE.

Тимофійчук Інга – кандидат медичних наук, доцент кафедри фізіології Буковинського державного медичного університету. Співавтор 5 підручників й автор понад 80 наукових статей. Коло наукових інтересів: вплив патогенних чинників на структуру і функцію нервової системи людини.

Tymofiychuk Inga – candidate of medical science, assistant professor of physiology of Bukovinian State Medical University. Co-author of 5 text-books and of over 80 scientific articles. Research interests: pathogenic factors influence on the structure and function of the human nervous system.

Семененко Світлана – кандидат біологічних наук, доцент кафедри фізіології ім. Я. Кіришенблата Буковинського державного медичного університету. Співавтор монографії та 5 підручників. Автор 79 наукових статей. Наукові інтереси: роль оксиду азоту в хроноритмічній регуляції діяльності нирок.

Semenenko Svetlana – candidate of biological sciences. Associate professor of physiology department named after Y. Kirshenblata of Bukovinian State Medical University. Coauthor of monograph and 5 textbooks. The author of 79 scientific publications. Research interests: the role of nitric oxide in the regulation of renal chronorhythmicity of kidney.

Received: 06.05.2021

Advance Access Published: June, 2021

© I. Tymofiychuk, S. Semenenko, 2021

⁷ Khoruzhaia R. E., Kalynovskyi D. K. Vnedrenye dystantsyonnykh form obucheniya v vysshei medytynskoi shkole: plany, vozmozhnosti y realnost [The introduction of distance learning in higher medical school: plans, opportunities and reality], IX mezhdunarodnaia konf. “Stratehiya kachestva v promyshlennosti y obrazovanyu”, 31 maia 7 yiunia 2013h.: tezysy dokl, Dnepropetrovsk, Varna, 2013, P. 459–461 [in Russian].