Krzysztof Wątorek[[1]](#footnote-1)

**Distance learning in the field of Internal Security. Experiences of the University of Law, Economics and Medical Sciences in Kielce**

**I. Foreword**

Despite the fact that detailed requirements for conducting classes using distance learning methods and techniques were set in Poland only in 2018[[2]](#footnote-2), they are not a new institution[[3]](#footnote-3). Earlier, conducting classes using distance learning methods and techniques was known as "e-learning classes"[[4]](#footnote-4). Upon the Regulation of the Minister of Science and Higher Education of September 25, 2007, their conduct could be carried out at all fields of study and all education levels at full-time and part-time studies. It was the University's responsibility to prepare its academic staff and students for conducting them and to provide access to IT infrastructure and software that enabled synchronous and asynchronous interaction between students and academic teachers. In addition, it was necessary to provide teaching materials developed in electronic form and to organize them in such a way as to provide each student with the opportunity for personal consultation with the teacher. Moreover it was a duty of the University to ensure ongoing monitoring of student progress and verification of knowledge and skills. It was important to organize classes so that mid-term and final examinations were carried out at the university. The number of hours of classes at full-time and part-time studies was set at the level of not more than 80% of the implemented education program for universities with the right to confer postdoctoral degree, 60% for universities with the right to confer doctoral degree and 40% for other universities.

The actual basis for introducing didactic classes using distance learning methods and techniques was the dissemination of electronic information transmission which the latest achievements in the field of multimedia technologies gave. Thanks to "e-learning" classes, students had the opportunity to participate in them without the need for direct contact with the teacher, and thus study freely by adjusting the individual pace of learning. However, this required a great deal of commitment on the part of the student and, above all, a huge self-discipline in the acquisition of knowledge. The existing regulations did not specify the detailed conditions for conducting "e-learning" classes, they only gave guidelines as to how they should be implemented and to what extent. Only the Regulation of the Minister of Science and Higher Education of 27 September 2018[[5]](#footnote-5) in Chapter 5 entitled "Distance learning" specified the requirements for conducting classes using methods and techniques of distance education and the maximum number of ECTS points that can be obtained under this education. It indicates that such classes may be conducted if the university meets the following requirements in total. First, the teaching staff must be prepared to conduct them through training, and their implementation is subject to ongoing control by the university. Secondly, the university will provide access to IT infrastructure and software that enables synchronous and asynchronous interaction between class leaders and students. In addition, students will be provided with didactic materials developed in electronic form and the opportunity to personally consult with the lecturers at the university or its branch. Another requirement concerns the possibility of verifying the outcomes of learning, achieved by students and ensuring ongoing monitoring of progress in learning, as well as conducting credits and examinations ending specific classes at the university's headquarters or branch. It is also a necessary requirement for students to undergo training to prepare for participation in classes using distance learning methods and techniques. The general rule was introduced that classes in this form are carried out when the study program provides lectures, and exceptionally in the case of classes shaping practical skills, when they can be implemented as used in auxiliary ways. Only in justified cases - with the consent of the rector, examinations ending specific classes may take place outside the headquarters of the university or outside its branch using information technology ensuring control of the exam and its registration. The number of ECTS points that can be obtained as part of education using distance learning methods and techniques is also indicated. It cannot be higher than 50% of the number of ECTS points envisaged in the study program.

The conditions defined in such detail allow a wider introduction of classes at universities using distance learning methods and techniques, as was the case with "e-learning" classes, despite the fact that there are plenty of opponents of this method. Of course, they are addressed to groups of students who want to reconcile raising their education with professional and family responsibilities, and thus most often students studying in the form of part-time studies. By reducing the frequency of visits at university, they are given the opportunity to raise their education level.

**II. The experience of the University of Finance, Law and Medical Sciences in Kielce in distance education in the field of internal security**

At the end of 2018 at the University of Economics, Law and Medical Sciences in Kielce, a team was set up to prepare the University for conducting classes using distance learning methods and techniques. Work was concentrated in two areas. The first, aimed at modernizing the electronic platform used to enable conducting symmetrical classes. The second is to create rules for conducting classes using distance learning methods and techniques. The works were completed in May 2019, modernizing and adapting the existing electronic platform to conducting classes using distance learning methods and techniques, and presenting the principles of conducting them, which were included in the Faculty Procedure No. 1/2019[[6]](#footnote-6). At the same time, while preparing the study plan for the 2019/2020 academic year, a pilot distance study program in the field of internal security and law was introduced to it. The previously created procedure was positively recommended by the University and the Faculty Committee on the Quality of Education, and then adopted by the Faculty Council and approved by the University Senate. This procedure defines the rules of implementing, preparing and conducting classes using distance learning methods and techniques. It provides that classes using distance learning methods and techniques may be conducted in all fields of study at the faculty starting October 1, 2019. The preparation and conducting of this type of classes takes place in accordance with the principles set out in this Procedure, the University of Economics, Law and Medical Sciences College Regulations and the rules set out in the Act of 20 July 2018 Law on Higher Education and Science, as well as in Chapter 5 entitled "Distance learning" contained in in the Regulation of the Minister of Science and Higher Education of 27 September 2018 regarding studies. Its purpose is to regulate, support and ensure the highest quality of education. Academic teacher authorized by the dean of the faculty is responsible for preparing and conducting classes using distance learning methods and techniques. The teacher develops and prepares materials in electronic form for students taking this form of classes to use. At the same time, the teacher is obliged to verify the learning outcomes achieved by students in accordance with the *"Rules and system for documenting and verifying the achievement of learning outcomes at the University"[[7]](#footnote-7)* adopted in 2015, and to monitor progress in learning. The Computer Network Administrator is responsible for preparing, sharing and improving the electronic platform for classes using distance learning methods and techniques. The dean of the faculty is responsible for ongoing control of the classes, and presents the results in the faculty's annual work report. The general rule is that this form of classes covers only lectures. In the case of skills-shaping classes, practical methods and techniques, distance learning can only be used as an auxiliary method. The total number of ECTS points that can be obtained during studies using distance learning methods and techniques cannot be greater than 50% of the number of ECTS points that can be obtained in the study program. The procedure details the tasks of the Computer Network Administrator. First of all, his duty is conducting training for academic teachers and students covered by this form of classes in the terms of operating the electronic platform. This obligation is fulfilled with consultation with the dean of the faculty. Another task is to administer and moderate the electronic platform, in particular to provide access to IT infrastructure and software enabling synchronous and asynchronous interaction between students and academic teachers and other class leaders. In addition, the Computer Network Administrator provides technical support to academic teachers in preparing and conducting classes using distance learning methods and techniques.

In the faculty procedure No. 1/2019, it was indicated that classes using distance learning methods and techniques can be implemented in two forms. The first, consisting of classes conducted entirely remotely, using the Internet, except for the first and last meeting, and the second form, the so-called mixed classes combining in any proportions traditional teaching methods with classes using distance learning methods and techniques. Both in the first and second form, classes using distance learning methods and techniques must be conducted in such a way that there is communication between the lecturer and participant, using various electronic forms, and in the case of mixed classes also direct contact with a teacher. Conducting classes using distance learning methods and techniques does not exempt from the need to provide students with the opportunity to take advantage of personal consultations with the teacher conducting classes at the University. The list of office hours dates is posted on the electronic platform.

It is the responsibility of the person conducting the classes to start them (first classes) and finish them (final pass) at the University. Only in justified cases, examinations ending specific classes, with the consent of the Vice-Rector for Didactics, may take place outside the university using information technology ensuring control of the examination and its registration. The classes are awarded ECTS points in accordance with the study program.

In order to start classes using distance learning methods and techniques, the teacher should obtain the consent of the Faculty Dean. For this purpose, the person conducting the classes submits an application to the dean of the faculty, at least two months before the planned start of the course, which should contain: indication of the subject, specification of the group of students using this form of education, specification of the date of the beginning and ending the classes, attaching a certificate of training or determining the date on which such training will take place (no later than before the start of the classes, attachment the relevant certificate to the application) and the subject syllabus.

Responsibility for the quality of the substantive content of the conducted classes (and posted on the electronic platform) rests on the teacher.

The teachers of WSEPiNM and persons from outside the academic community who are tied to the University by an appropriate agreement and have completed e-class training can run e-classes. The work of the lecturers is supervised by the dean of the faculty.

The person conducting the classes is obligated to:

* supervising the course of classes, including monitoring the participants' activity and learning progress,
* communication with participants in a pre-determined manner (electronically or directly),
* verification of the achievement of the assumed learning outcomes by students, including assessment of individual tasks performed as part of e-classes and/or issuing of the final grade from e-classes,
* download student ratings, selected reports or survey results before the e-class end date,
* establishing the form and dates enabling participants to contact each other personally.

To verify students' knowledge, skills and social competences, tools available on the Platform may be used. After completing the course, students complete a questionnaire assessing the quality of e-classes, which is verified by the dean of the faculty to ensure the quality of education.

After completing the whole cycle of education in a given subject, documentation of completed classes is archived.

**III. Classes using distance learning methods and techniques as a tool in the "Cybersecurity fundamentals" project implemented by WSEPiNM with external partners**

The *“Cybersecurity fundamentals”[[8]](#footnote-8)* project aims to provide teaching materials for internal security students. It is coordinated by the College of Economics, Law and Medical Sciences of prof. Edward Lipiński in Kielce. The project partners are Vysoka Skola Regionalniho Rozvoje a Bankovni Institut - Ambis AS Czechach and Instituto Politecnico de Beja in Portugal. Its implementation time is 36 months, co-financed by the Erasmus+ program in the amount of 315 112.27 euros. The main goal of the "Cybersecurity fundamentals" project is to create an innovative, attractive and effective e-learning course that will teach basic cybersecurity skills for students of internal security, IT, economics, management and law. Existing curricula at universities include various subjects related to information system security (e.g. 'information security', 'information risk and security', 'IT equipment, systems and network security' etc.). The result of this project will be a set of six educational modules containing all the basic information that a graduate of this specialization will need in an average workplace.

The acquired knowledge and skills will help graduates in their professional and everyday life and will significantly increase their employability. The tangible result of the project will be an open online course consisting of 6 modules with video, interactive animations, quizzes created using the latest e-learning software. Three universities, i.e. from Poland, the Czech Republic and Portugal, cooperate on the project. The main target group are students of the above-mentioned faculties at these universities, whose number will reach several thousand people only in the first year of implementing the intellectual effects of the project. Other beneficiaries are companies and institutions that will be able to use the results to train their employees due to the open nature of the online course and its intended use as a stand-alone course without further instructions. The project results are only the first of the expected series of e-learning courses that will eventually become a complete, highly specialized, innovative cybersecurity master's program based largely on distance learning - the first of its kind in Europe. This is part of the broader long-term strategy of the institutions involved.

Today's internal security graduate is no longer a bodyguard or night watchman. They are a highly qualified specialist capable of recognizing and dealing with all kinds of threats. Currently, the most common and one of the most dangerous for organizations is the threat of data security, which today means business information, money, personal security, etc. The goal of the project is not to train students in advanced technologies or programming, but to provide them with knowledge and skills making them competent guardians of their institutions, in the full sense of the word "guard".

Students will learn about threats to the security of IT systems and will be able to recognize where and when they may occur. They will know how to deal with suspicious activity and what specialists to ask for help in solving the problem if more complex IT knowledge is needed. First of all, graduates will be able to prevent most attacks on their institution's IT systems. "People remain the weakest link in the security chain, and investing and developing a cybersecurity culture in organizations can reduce the risk related to the human factor, positively affecting performance and security, and at the same time reducing financial risk." Prevention will mean daily care for such basics as appropriate passwords and their timely change, installation and continuous updating of the latest computer security software, responsible use of websites and mail.

Graduates will also be responsible for the correct implementation of the General Data Protection Regulation. In larger organizations this may be their only duty. In others - one of many. In every organization, their knowledge and skills will certainly be needed.

The transnationality of the project will allow participants to exchange information leading to the universalization of the resulting materials. As the subjects will be implemented not only in the languages of the partner countries, but also in English, and at the same time they will be fully available for free online, it will be easy to adapt them to the needs of other countries.

The innovative nature of the project consists of creating a unitary, comprehensive and complete course applicable and applicable in all project countries as well as outside them. The authors will take existing materials and partial training into account, as well as existing literature on the subject, in particular the results of extensive research carried out by the European Union Agency for Network and Information Security. In this way, security students from various universities, including foreign universities, are given the opportunity to participate in the training process in the field of cyber crime as long as they are recruited for this project. Forms and methods of the didactic process prepared by employees of WSEPiNM in Kielce in cooperation with colleagues from Portugal and the Czech Republic using distance education allows for synchronous and asynchronous mode of communication conducting classes with students, conducting knowledge consolidation exercises, for discussion, checking learning progress and learning outcomes in cybercrime. Thanks to this, students who are a part of this process not only have the opportunity to communicate with each other and the lecturer conducting the classes, but can also exchange experiences, ideas in solving the problems given to them, and also reach for help when they encounter difficulties in a given area. In addition, it gives the opportunity to activate students who can come to the right solutions together and thus achieve learning outcomes in the field of competence specified in the study program. An important element of the developed teaching process is the possibility of using the prepared website containing the content of education, as in a traditional textbook. The lecturer will also post information on the organization of planned activities on this page. Moreover, there will be an interactive database about the entire didactic process on this site, which will contain information necessary to complete the task. This information will be placed in the appropriate records prepared by the teacher. In this way, the material available for all students, both those who take part in the current teaching process and those who will study later, will be collected. The collected material will enrich the synchronous interaction of the lecturer with students.

**IV. Conclusion**

Conducting classes using distance learning techniques and methods is an element complementing the traditional didactic process by the "face to face" method, which dominates in all universities currently in Poland. It is used most often when there is no possibility of direct contact between an academic teacher and students, e.g. conducting classes by a lecturer from another country. Its main feature is synchronous and asynchronous interaction between the lecturer and students as well as ongoing monitoring of the partial learning outcomes achieved by students. It is necessary to put forward the thesis that, along with the progress of electronic information transmission in the near future, classes using distance learning methods and techniques will dominate the teaching process at Polish universities. The vision of a "university without walls" also gives new education opportunities, in particular access to the best specialists from outside the local environment (also from outside the country), and thus the use of information resources of other universities. It also definitely broadens the scope of student recruitment, which can be people residing in different parts of the world. It seems that barriers limiting the directing of the process of distance education of students by the academic teacher will disappear. However, with this form of classes, it is important for the lecturer to have access to every student and not let him disappear among others. Based on the prepared project, it should be presumed that distance education in the field of cybercrime will be especially important for people residing outside the university premises participating in the project but above all for people with disabilities. This thesis is supported by the fact that it is a non-rigorous form of learning in terms of place, time and pace. When popularizing the implemented 'Cybersecurity fundamentals' project, the number of students who can benefit from it will increase, and thus reduce the cybercrime in the future.

**Abstract**

The purpose of the study is to present experience in the preparation of classes using distance learning methods and techniques implemented in the field of law and internal security at the Faculty of Law and Security at the University of Finance, Law and Medical Sciences in Kielce. It presents the process of preparing the faculty for conducting this type of classes and how to use them. The rules of conducting them resulting from the Faculty Procedure No. 1/2019 of May 7, 2019, including the conditions provided in Chapter 5 of the Regulation of the Minister of Science and Higher Education of September 27, 2018 regarding studies, were discussed in detail. It referred to the prepared and implemented project entitled "Cybersecurity fundamentals" coordinated by the University of Economics, Law and Medical Sciences in Kielce, Vysoka Skola Regionalniho Rozvoje a Bankovni Institut - Ambis AS Czechia and Instituto Politecnico de Beja in Portugal. The study deals with the use of distance education in this project. The conclusion indicates key difficulties associated with the use of classes using methods and techniques at a distance. Normative acts were used in the study.

**Keywords:** classes, e-learning, project, cybercrime, WSEPiNM (University University of Economics, Law and Medical Sciences).

**Bibliography**

**I. Normative acts**

1. Regulation of the Minister of Science and Higher Education of 25 September 2007 on the conditions that must be met for classes in college to be carried out using methods and techniques of distance education, Dz. U. Nr 188 poz. 1347 z późn. zm.
2. Regulation of the Minister of Science and Higher Education of 27 September 2018 regarding studies, Dz.U. 2018 poz. 1861.
3. The Act of 27 July 2005 - Law on Higher Education, Dz. U. z 2012 r. poz. 572 z późn. zm.
4. Higher Education and Science Act of July 20, 2018.. Dz.U. poz. 1668.

**II. Other**

1. European Union Agency for Network and Information Security (ENISA), 'Cyber security culture in organizations', 2017.
2. Project "Cybersecurity Fundamentals" no. 2019-1-PL01-KA203-065688, project website: www.cybersecurity-fundamentals.eu
3. Faculty Procedure No. 1/2019 of May 7, 2019 regarding the organization of conducting didactic classes using distance learning methods and techniques since the academic year 2019/2020.
4. Principles for documenting learning outcomes at the Faculty of Law at the University of Economics, Law and Medical Sciences in Kielce of September 1, 2015.
5. Verification system of acquired learning outcomes at the Faculty of Law at the University of Economics, Law and Medical Sciences in Kielce of September 1, 2015.

1. Law sciences Ph. D., researcher at the University of Economics, Law and Medical Sciences by the name of prof. E. Lipiński in Kielce dealing with the phenomenon of corruption, author of several publications in this field. [↑](#footnote-ref-1)
2. Regulation of the Minister of Science and Higher Education of 27 September 2018 regarding studies, Dz.U. 2018 poz. 1861 introduced on the basis of art. 81 of the Act on Higher Education and Science of July 20, 2018. Dz.U. poz. 1668. [↑](#footnote-ref-2)
3. The Act of 27 July 2005 - Law on Higher Education, Dz. U. z 2012 r. poz. 572 z późn. zm. w art. 164 ust. 3 had been the legal basis for their conduct. [↑](#footnote-ref-3)
4. Ordinance of the Minister of Science and Higher Education of 25 September 2007 on the conditions that must be met in order for classes to be conducted using distance learning methods and techniques, Dz. U. Nr 188 poz. 1347 z późn. zm.. [↑](#footnote-ref-4)
5. Regulation of the Minister of Science and Higher Education of 27 September 2018 regarding studies, Dz.U. 2018 poz. 1861. [↑](#footnote-ref-5)
6. Faculty Procedure No. 1/2019 of May 7, 2019 regarding the organization of conducting didactic classes using distance learning methods and techniques since the academic year 2019/2020. [↑](#footnote-ref-6)
7. Principles for documenting learning outcomes at the Faculty of Law at the University of Economics, Law and Medical Sciences in Kielce on September 1, 2015 and a System for verifying the learning outcomes at the Faculty of Law at the University of Economics, Law and Medical Sciences in Kielce on September 1, 2015 r.

   [↑](#footnote-ref-7)
8. Project number "Cybersecurity Fundamentals" - 2019-1-PL01-KA203-065688, project website: www.cybersecurity-fundamentals.eu [↑](#footnote-ref-8)