College of Applied Sciences „Lavoslav Ružička“ in Vukovar
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The College of Applied Sciences “Lavoslav Ružička” in Vukovar was founded on 22 July 2005. The College is situated in the Jirkovsky palace, a protected cultural monument designed in 1874 in the early historicism style. The College is equipped with quality furniture and contemporary information and communication technology. Contemporary tools are used in teaching: block-boards, computers, overhead projectors, etc. The College also has a videoconference room.

Three undergraduate professional study programs are conducted at the College of Applied Sciences “Lavoslav Ružička” in Vukovar: Physiotherapy, Public Administration and Commerce lasting 6 semesters and consisting of 180 ECTS credits. All of the three study programs are conducted as full-time and part-time studies. Both methods of study provide equal rights.

As part of the Health Studies Department the Specialist Graduate Professional Study in “Preventive Physiotherapy” is conducted. The course lasts two years and included 120 ECTS credits. The awarded professional title upon completion of the study is: Master of Physiotherapy.

Teaching is performed in groups of optimal sizes that are adapted to each teaching course at the College. For part-time students teaching is organised so that students can attend it after their working hours. The College of Applied Sciences “Lavoslav Ružička” in Vukovar has organised its work in accordance with the Bologna Declaration and legal regulations of the Republic of Croatia.

In order to gain practical knowledge during their study, students of the College attend obligatory professional training that is conducted in the facilities, state institutions and larger business entities on the territory of Vukovar-Syrmia County.
Lavoslav Ružička was born in Vukovar on 13 September 1887. At the age of four he moved to Osijek where he finished primary school and grammar school. From 1906 to 1910 he studied chemistry at the High Technical School (ETH) in Karlsruhe in Germany where he earned his doctoral degree under the supervision of professor Staudinger, the founder of macromolecular science. For a while he lived in Geneva, and in the period from 1927 to 1929 he worked as a professor of organic chemistry in Utrecht. His return to Zurich marked the beginning of the most successful period of his career. Ružička drew huge attention when he published a partial synthesis of male sex hormone androsterone in 1934 and also of testosterone the following year. The papers on sex hormones and steroids brought Ružička his scientific reputation and in 1939 he was awarded the Nobel Prize in Chemistry for his work on polymethylenes and higher terpenes. He was elected honorary member of the Yugoslav Academy of Sciences and Arts and the honorary doctor of University in Zagreb. In 1940 he became an honorary citizen of the City of Vukovar and on that occasion he signed a picture as 'inhabitant of Vukovar Lavoslav Ružička, 1940'. He retired in 1957 at the age of 70. On that occasion the Ružička Award for prominent young Swiss chemists was established with the help of the Swiss chemical industry. There are three main fields of Lavoslav Ružička's scientific work: large rings, higher terpenes and sex hormones. He published 583 scientific papers with his associates. He was editor and a member of editor's office of many scientific journals. He is a holder of many acknowledgements, the winner of Marcel Benoit Prize (the highest scientific acknowledgement in Switzerland), a laureate of 8 honorary doctoral degrees, and a member of 18 scientific academies including the Papal academy. He was awarded 13 different medals and prizes. Although he acquired Swiss citizenship, Ružička considered Croatia to be his homeland and he helped numerous Croatian chemists. Some of his associates achieved great results such as Vladimir Prelog who is also the Nobel Prize-laureate in Chemistry. Lavoslav Ružička died on 26 September 1976 in Mammern on Lake Constance at the age of 89 and was buried in Zurich.
Physiotherapy is a branch of medicine that is extremely demanding and complex in its structure. It includes a good knowledge of anatomy, physiology, psychology, kinesiology, biomechanics, etc. The complexity of the Study of Physiotherapy is the result of demands set before physiotherapists nowadays. The future of physiotherapy lies in specialists who will be able to perform quality work in prevention, but also give independent diagnoses and lead the process of rehabilitation when required. The Study of Physiotherapy is adapted to demands of modern physiotherapy.

**Competences which students acquire after the completion of studies**
The Study of Physiotherapy is created to cover a wider range of knowledge and skills that are necessary for physiotherapists today in order to successfully conduct programmes of both prevention and rehabilitation. For this reason, special attention is given to practical training and classes performed directly by students with users. The study educates professionals for participating in teamwork through the following activities: estimating the users' condition and the need for physiotherapeutic treatment, conducting kinesio-metrical and other measurements for diagnosing the functions of a loco-motor system, planning and programming the physiotherapeutic procedures, evaluating treatment effects, participating in education of physiotherapists and participating in research in the field of physical therapy.

**Qualification provided for vocations and jobs**
Students are qualified to perform work in sports clubs, healthcare and rehabilitation institutions, recreation centres and health tourism facilities.

**Length of study**
The study lasts six semesters and is completed with the defence of the graduation thesis. The study includes teaching content corresponding to 180 ECTS credits.

**Professional title**
Upon completion of the professional study, a professional Bachelor's degree in Physiotherapy is awarded (Baccalaureus/Baccalaurea) - bacc. physioth.
The aim of the Professional Study of Commerce is to educate economists to execute different types of work in business entities under the conditions of Croatian economic openness and to qualify economists for different analytical and management positions at commercial economic operators. With its program, the Study of Commerce enables the understanding of basic market-oriented approach the management of a company, mastering the execution and running all processes of merchandise transactions on the domestic and foreign market and acquiring basic knowledge for other analytical and administrative work in commercial and logistic economic entities.

Competences which students acquire after the completion of studies
Through the Professional Study of Commerce students acquire basic and advanced economic knowledge as well as specific theoretical and practical knowledge related to the field of commerce. That way students are qualified to carry out and perform different types of work, for independent and teamwork in the commercial economic entities and also to perform successful merchandise transactions on the domestic and foreign markets.

Qualification provided for vocations and jobs
Students are qualified to carry out and perform different types of work in the commercial and other economic entities, such as: purchasing/sales officers, retail trade unit managers, branch office managers, product managers, warehouse managers, sales promoters, marketing actions managers of a trading company, etc.

Length of study
The study lasts six semesters and is completed with the defence of the graduation thesis. The study includes teaching content corresponding to 180 ECTS credits.

Professional title
Upon completion of the professional study, a professional Bachelor’s degree in Economy is awarded (Baccalaureus/Baccalaurea) - bacc. oec.
The aim of the Professional Study of Public Administration program is to provide the students with the possibility to acquire basic theoretical and practical knowledge for direct inclusion in work processes. The current social context and projection of future conditions in the labour market show the need for trained personnel who will master the theoretical and practical skills of public administration, but also for highly educated experts in the field of managing and running the bodies and organisations of state administration, regional and local self-government and economy. The contents of lectures, exercises and tasks rely on the existing training and integrating experience that arises therefrom. Therefore, teaching classes are organised so that students are inspired to think in the meaningful and methodological sense, to be creative and independent in their work.

**Competences which students acquire after the completion of studies**

During the Professional Study of Public Administration students are qualified for independent performance of the following work: independent running of administrative and non-administrative procedures and making administrative decisions, conclusions and other individual acts; preparation and completion of the general and specific normative acts; participating in the implementation of public procurement procedure in legal entities; organising, running and operating managerial work in state, regional, local and other public law authorities; preparation and implementation of projects directed towards the development and improvement of work performed by legal entities as well as continuous work on raising the quality of services, which state authority, regional and local self-government units and other public law authorities provide to their users.

**Qualification provided for vocations and jobs**

Upon completion of the Professional Study of Public Administration, employment in administrative and legal work is provided in state administration, regional and local self-government, police, customs, army and also in other economic entities.

**Length of study**

The study lasts six semesters and is completed with the defence of the graduation thesis. The study includes teaching content corresponding to 180 ECTS credits.

**Professional title**

Upon completion of a professional study, a professional Bachelor’s degree in Public Administration is awarded (Baccalaureus/Baccalaurea) - bacc.admin.publ.
Specialist Graduate Professional Study of “Preventive Physiotherapy”

The Specialist Graduate Professional Study of Preventive Physiotherapy was created in accordance with the demands and requirements of the labour market, which has shown that the future of physiotherapy lies in specialists who will be able to perform quality work in prevention, but also give independent diagnoses and lead the process of rehabilitation when required. The necessity to meet the international standards in physical therapy, pursuant to the recommendations of the World Confederation for Physical Therapy (WCPT), requires determined shifts in the educational system as well as in the organisation of clinical work of physiotherapists.

Physiotherapy, as a branch of medicine entails care of persons of all age categories, in conditions of good health as well as in various phases of illness with the primary goal to optimise motion, functionality and health. This discipline is holistically oriented towards the incorporation of physical, mental and emotional well being in the wide spectre of different environments. Therefore, the goal of the Specialist Graduate Professional Study of Preventive Physiotherapy is the creation of a sufficient number of specialists, who, upon the completion of their study, shall be competent to organise, analyse and research all phases and elements of physiotherapy, which formally refer to the management of acute and chronic injuries and diseases with a holistic approach to the patient.

The Specialist Graduate Professional Study of Preventive Physiotherapy was created with the purpose of educating highly expert physiotherapy staff educated and motivated to work with the population of the growing number of participants in sports and exercise in Croatia, as well as with the users of recreational and wellness programmes, which require a clinical approach to physiotherapy and flexible support for the improvement of everyday working capacity.
In the last ten years approximately, the field of physiotherapy has become more and more demanding, and in order for the persons qualified to work as physiotherapists to be able to perform all planned activities, with all age categories, they are required to possess advanced knowledge from the spectre of different disciplines and sub-disciplines such as anatomy, physiology of physical activities, sports medicine, emergency medicine, neuroscience, but also psychology, management, kinesiology, prosthetics, biomechanics, etc. For those reasons exactly the syllabus and programme of the Specialist Graduate Professional Study of Preventive Physiotherapy consists of the aforementioned disciplines and sub-disciplines. Also, the diversity of today’s practice in physiotherapy requires a spectre of specific skills, which shall be adopted during the study, and for that reason, almost all courses include educational units, which entail the acquisition of necessary skills. Physiotherapists today are far from being strictly hospital staff responsible for the implementation of the programme prescribed by the physician and therefore the necessity for advanced knowledge and familiarisation with new technologies in the area of communication, evaluation and treatment is growing. The Specialist Graduate Professional Study of Preventive Physiotherapy was devised and adapted to the requirements set by modern physiotherapy.

The Specialist Graduate Professional Study of Preventive Physiotherapy lasts two years and includes 120 ECTS credits. By acquiring the professional title Master of Physiotherapy, students are qualified to work independently in the field of application of physiotherapy in different segments.
In 2005, within the scope of the Study of Physiotherapy, a specific preliminary project of the Centre for Trauma and Fitness was initiated, the contents and capacities of which meet the defined requirements of the teaching process as well as the process of the wider community. The Centre for Trauma and Fitness is a place of meeting where citizens and students of the College can use various specific programmes to improve their quality of life within the facilities built for such purposes, within the College of Applied Sciences “Lavoslav Ružička” in Vukovar. At the same time, the Centre provided the students of the Undergraduate Professional Study of Physiotherapy with excellent conditions to study and acquire professional-theoretical and practical knowledge, as well as the development of communication skills in their work with future patients/clients.

Upon accreditation of the new Specialist Graduate Professional Study of “Preventive Physiotherapy”, the Centre for Trauma and Fitness has evolved into the Centre for Sports Diagnostics and Recreation, considering that the goal of the Specialist Graduate Professional Study is the creation of a sufficient number of experts, who, upon the completion of their study, shall be competent to organise, analyse and research all phases and elements of physiotherapy, which formally refer to the management of acute and chronic injuries and diseases with a holistic approach to the patient.

The Specialist Study is a modern connection of clinical biomedicine and kinesiology, and the purpose of the study is to qualify the students to work independently in the field of physiotherapy in healthcare institutions, healthcare-rehabilitation centres, sports clubs and institutions for recreational sports, as well as for associate work at scientific and clinical research (projects, communication, presentation).

Experts of the Study of Physiotherapy manage the Centre for Sports Diagnostics and Recreation, and students of the second and third year of the Professional Undergraduate Study in Physiotherapy also participate in its implementation, as well as students of the Specialist Study of “Preventive Physiotherapy”, who have shown their inclination to this type of work during their studies.
Erasmus+ is the largest programme of the European Union in the field of education, training, youth and sports, created for the period between 2014 and 2020. It includes all European and international programmes and initiatives of the European Union in the field of education (general education, higher education, education of adults), and qualification (vocational education and qualification), of youth and sports.

Erasmus+ has replaced seven existing programmes of the generation 2007 – 2013. The Lifelong Learning Programme with sub-programmes Erasmus, Leonardo da Vinci, Comenius, Grundtvig, the Youth in Action Programme, and five international cooperation programmes Erasmus Mundus, Tempus, Alfa, Edulink and the Programme for Cooperation with Industrialised Countries and Territories. Support in the field of sports is introduced for the first time. The new program also adopts a unified structure with three clear “Key Action” areas:

1. Learning Mobility of Individuals;
2. Cooperation for Innovation and the Exchange of Good Practices;

Erasmus+ is aimed towards the strengthening of competences and skills and the employment of European citizens, as well as the improvement of education, qualification and work in the field of youth and sports. The goal of the Erasmus+ programme within the scope higher education is the modernisation and improvement of higher education across Europe and worldwide.

The Erasmus+ programme includes 28 Member States of the European Union, as well as the countries that have signed the agreement to participate in the Erasmus+ programme. Acceptable states are divided into two groups, states participating in the programme, which can participate in all activities of the programme and the partner states, which can participate in determined activities.
The College of Applied Sciences “Lavoslav Ružička” in Vukovar was awarded the Erasmus+ Charter for Higher Education (EHCE), which allowed the College to participate in the Erasmus+ programme.

The international mobility programme for individuals provides full- and part-time students of the College the opportunity for international exchange, in order to spend part of their study at one of the foreign higher education institutions, with which the College has signed a bilateral agreement or at any foreign organisation for the performance of professional training.

Through the international mobility programme, teaching and non-teaching staff of the College has the opportunity to visit foreign colleges of partners participating in the programme for the purpose of teaching, or any foreign organisation for the purpose of additional training.

The College of Applied Sciences “Lavoslav Ružička” in Vukovar started implementing the mobility programme with success. In their further work, the College intends to enter into numerous inter-institutional agreements in order to provide to its students, teaching and non-teaching staff a greater choice of mobility and in order to accept students and staff from various foreign institutions of higher education with the purpose of internationalisation of the College, which shall be favourable for students and staff who do not leave for exchange abroad.

Within the goal of strategic improvement of skills and the construction of organisational facilities, the College is interested in the development of international partnerships for collaboration on professional, scientific, research and cultural projects for the purpose of achieving innovative results or the exchange of good practices.
Students' Entrepreneurial Incubator VUPI

The Students' Entrepreneurial Incubator VUPI was founded on 20 November 2013 with the aim of promoting the entrepreneurship and self-employment of the student population. The main task of the Students' Entrepreneurial Incubator is to train young people with quality educational activities for the recognition of opportunities, business planning and starting one's own company also including the development of certain skills such as sense of initiative, creativity, independence, and team work.

The primary goal of the establishment of the Students' Entrepreneurial Incubator at the College is to enable the acquisition of knowledge and skills and to prepare students of all three study programs to enter the world of entrepreneurship. The advisory support is provided in the Incubator for interested students. As a means of additional support guest lectures of reputable entrepreneurs and other lecturers who present the current topics in entrepreneurship are organised. The Students' Entrepreneurial Incubator includes the plan to set up companies of interested students. The Incubator will help students with: providing the necessary infrastructure, advising, generating and forming business ideas, elaborating business plans, market research and networking with contractors. Mentors from different fields are at the students' disposal through the virtual platform “network of students' entrepreneurial incubators”.

The library at the College operates as a special organisational unit with the purpose of efficient and complete provision of the conditions for the realisation of classes, professional, scientific and research activities.

The library activity includes the procurement of library materials, professional processing, keeping and protecting library materials, computer equipment and inventory of the library, provides the use and borrowing of library materials, and provides help for users in choosing and using the materials.

The library materials are adapted to the needs of the Study of Physiotherapy, the Study of Public Administration, and the Study of Commerce. Reference literature and journals make a special component thereof. The library materials are processed via computers and available to users for work in the reading-room or for borrowing. The users of the library are students, teaching staff and external associates.

As a part of the library, there is a contemporary equipped reading-room with 16 computers and 10 sitting-places. The access to databases and other sources of information is provided. Also, the use of wireless network for Internet access is enabled.
Student Body

The Student Body is active at the College, which participates in the work of the Professional Board of the College and conducts different activities in order to improve the quality of students’ life. The Student Body organises different projects and cooperates with different associations on the territory of Vukovar-Syrmia County.

Sports Association

The Sports Association of the Students at the College of Applied Sciences “Lavoslav Ružička” in Vukovar was founded on 10 March 2011. The goal of the Association is to promote and develop healthy life habits among students, to organise charity and sports events, to promote sports activities at the College, to cooperate with other students’ associations, and to develop a friendly and competitive spirit among association members. Students promote all these activities through different sports sections: basketball, futsal, volleyball, beach volley, table tennis, jogging, rowing, and dance.

The most important projects of the Sports Association are the International regatta of St. Phillip and Jacob in Vukovar, Students' Sports Day and Students' Cross Race.

We are especially proud of the sports achievements: rowing - male eights (3 third places), female eights (1 first place, 2 second places, 2 third places); futsal (2 third places); volleyball - female (1 first place); table tennis - male (1 first place).

Volunteering

As an act of helping other and different people who are often weaker, volunteering is recognised at the College as an activity with the educational potential for future generations of students in creating compassion and solidarity as key features.

The College actively cooperates with some organizations: "Vukovarski leptirići", organization for children with sensorimotor development disorders, "Iskrice", an organisation which provides help to people with intellectual disability, and humanitarian organisation “Duga” Vukovar. These organisations are actually a meeting point for students, children-users and their parents where students can hear valuable parental experiences and learn about experiences and problems.

Students gain a volunteering card for their volunteering work and effort, but also friendship and experience.