

Univerza v Novem mestu University of Novo mesto

### CLEAN COPY OF THE HIGHER EDUCATION PROFESSIONAL STUDY PROGRAMME 1<sup>st</sup> CYCLE

# PHYSIOTHERAPY,

implemented by University of Novo mesto Faculty of Health Sciences

> Novo mesto, December 2023 (change of the study programme)

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Name of the study programme:	Physiotherapy
Cycle	Bologna 1st cycle
Туре:	higher education professional study programme
Duration:	3 years
ECTS amount:	180 ECTS
Klasius P-16:	0915 – Therapy and rehabilitation 0914 – Medical diagnostic and therapeutic technology
Research area (Frascati):	primarily medical sciences, however, due to the interdisciplinary character it also includes the field of natural-mathematic sciences, social sciences and humanities
SOK (Slovene classification framework)	level 7
EOK (European classification framework)	level 6
EOVK (European higher education classification framework)	first cycle
Accreditation:	Accreditation of the study programme: Slovenian Quality Assurance Agency for Higher Education (NAKVIS), decision No. 6033-2/2018/23; on 17 January 2019.

#### 1 GENERAL INFORMATION ABOUT THE PROGRAMME

In the development of the higher education professional study programme - 1st cycle *Physiotherapy*, the following documents have been consistently considered:

- Higher Education Act (Official Gazette of the RS, No. 32/12 official consolidated text, 40/2012, 57/2012, 109/2012, 85/2014, 75/2016, 61/2017 and 65/2017),
- Professional and Academic Titles Act (Official Gazette of the RS, No. 61/06, 87/2011 and 55/2017),
- Criteria on Accreditation of Higher Education Institutions and Study Programmes (Official Gazette of the RS, No. 42/2017 and 14/2019),
- Criteria for Credit Assignment to Study Programmes According to ECTS (Official Gazette of the RS, No. 95/2010),
- Order on the List of Professions in Health Care (Official Gazette of the RS, No. 4/2014).

#### 2 FUNDAMENTAL OBJECTIVES AND COMPETENCES

#### 2.1 Fundamental objectives of the study programme

The basic aim of the higher education professional study programme at the 1st cycle *Physiotherapy* is to educate and qualify graduates for professional, responsible, safe and ethical pursuit of the profession of physiotherapist at all levels of healthcare activities

and health resorts in accordance with the requirements of the Ordinance on the List of Occupations in Health Care.

The study programme enables students to gain the expert knowledge and to develop their competences for:

- direct employment after their studies;
- continuation of their studies at the second cycle and participation in training programmes;
- permanent professional and personal growth and
- understanding of the global professional, political, social and cultural environment.

The graduate physiotherapist will be qualified for:

- an in-depth theoretical and practical knowledge in the selected professional area, supported by broad theoretical and methodological basis Knowledge (SOK).
- performing complex operational professional tasks using methodological tools; managing demanding complex work processes of physiotherapy with the independent use of knowledge in new working situations; diagnosing and solving problems in various specific work environments related to the field of education and training; development of original findings, achievements and critical reflection - Skills (SOK);
- qualification for working in different environments, holding different positions and functions, and conveying new knowledge. Taking responsibility for determination and achievement of personal results and/or the results of heterogeneous team work within the defined areas of work. Qualification for supported discussion in specific work environments, connected with the area of education and training. Recognition of personal needs for education, taking initiative for one's own learning, qualification for transferring knowledge in groups - Competences (SOK).

The graduate of the programme will be qualified for implementation of the occupational activity in accordance with the requirements of the Ordinance on the List of Occupations in Health Care:

- independent implementation of physiotherapeutic activities upon considering the indications and contraindications of procedures, methods and techniques of physiotherapeutic treatment,
- evaluating and documenting the patient's functional status and abilities, and checking one's own work,
- maintaining, establishing and improving psychophysical abilities and capacities of the healthy, developmentally challenged and otherwise ill,
- designing a physiotherapeutic programme for the patient based on an evaluation of the systems' functions and personal characteristics of the patient,
- the use of methods and techniques of movement therapy and physical energies to stimulate or inhibit physiological mechanisms and establish their balance,
- setting the goals of physiotherapeutic treatment with the participation of the patient or user of the service,
- contributing to a clearer diagnosis and prognosis when assessing data by highlighting the problems and goals of physiotherapy, in collaboration with a doctor and other team members,
- ongoing verification of the effects of individual therapeutic procedures and taking action,
- designing, implementing and verifying preventive health education programmes and, if necessary, ongoing monitoring,

• preparation of the results reports and reporting to the treating physician or specialist.

#### 2.2 General competences

From the aspect of general competences, the graduate of the higher education professional study programme at the first cycle Physiotherapy will be qualified for:

- using theoretical and practical knowledge in organisation, planning and implementation of activities;
- autonomy in professional work and decision making;
- knowing and observing professional codes of conduct and respecting moral and ethical standards;
- knowing and observing the healthcare legislation, regulations, and professional and organisational rules;
- identifying needs for changes in practice, developing and critically introducing new approaches, based on the evidence-based practice and providing initiatives for improving quality within the profession and/or organisation;
- independent and responsible lifelong learning in the professional field;
- evaluating personal work quality by using the quality loop (the Deming Cycle): planning, implementation, evaluation, and introduction of the anticipated measures;
- being aware of and observing the limitations to one's knowledge and skills;
- searching for and obtaining relevant scientific literature and sources of information that support practice;
- critical evaluation of research approaches and findings and integrating findings into clinical practice;
- educational work and mentorship;
- effective communication in the field of health care;
- establishing and maintaining a suitable work environment and equipment for performing physiotherapy;
- integrating new technologies (including ICT) for improving physiotherapy practice;
- comprehending the scientific development of the profession and other professional areas;
- demonstrating appropriate professional conduct and attitude;
- understanding and promoting the role of a physiotherapist within the team and the healthcare system;
- defining priorities and handling the workload;
- efficient use of resources in accordance with the professional standards and code of ethics.

The general competencies have been harmonised with the guidelines of World Physiotherapy – Europe Region (Guidance Document – Expected Minimum Competencies for an Entry Level Physiotherapist in the Europe Region) adopted by the Education Matters Working Group (EMWG) on 20 May 2022 in Prague.

#### 2.3 Course-specific competences

From the aspect of course-specific competences, the graduate of the higher education professional study programme at the first cycle Physiotherapy will be qualified for:

• evaluating the patients' health status, defining types and extent of functional limitations of the locomotor system;

- delivering the physiotherapeutic diagnosis based on the medical diagnosis and the results of diagnostic imaging and laboratory tests;
- suggesting the appropriate physiotherapeutic treatment and keeping record of the required documentation;
- knowing the principles of the physiotherapeutic treatment;
- analysing patients' activities of daily living from the aspect of locomotor system's functional abilities, ergonomy and rehabilitation;
- planning appropriate physiotherapeutic treatment according to the "SMART" principle (SMART = Specific, Measurable, Achievable, Realistic and Time-framed), which is based on setting specific objectives and considers the individual's wishes, beliefs and choices;
- implementing safe and effective physiotherapy by using the appropriate physiotherapeutic methods and techniques;
- using the aids and devices for performing physiotherapy;
- recognising, respecting, considering and including the individual needs of patients into their physiotherapeutic treatment (patient-centred);
- ensuring the safety and dignity of patients during physiotherapeutic treatment;
- documenting the physiotherapeutic treatment to provide information on the clinical grounds for the treatment and on its implementation in accordance with the ethical and legal requirements;
- giving clear and structured instructions to patients;
- clear and professional communication with patients, relatives and carers within the therapeutic relationship;
- cooperating in physiotherapeutic, interdisciplinary and multidisciplinary teams;
- spoken and written communication with colleagues and other experts;
- evaluating results and effectiveness of the therapy (critical reflexion);
- promoting health, health education and preserving and improving the quality of life;
- emphatic communication in interaction with patients during the therapeutic treatment;
- empowering patients to change their lifestyle;
- using the biopsychosocial approach to identifying health factors, recognising the needs of patients for social rehabilitation and providing basic information on social treatment possibilities;
- knowing, planning and using methods and techniques in the special areas of physiotherapy, developed by elective courses;
- using ICT that is being used in physiotherapy practice;
- collecting, evaluating and visualising the data obtained during physiotherapeutic treatment;
- observing the data protection principles.

The course-specific competencies have been harmonised with the guidelines of World Physiotherapy – Europe Region (Guidance Document – Expected Minimum Competencies for an Entry Level Physiotherapist in the Europe Region) adopted by the Education Matters Working Group (EMWG) on 20 May 2022 in Prague.

The study programme is designed according to the principles of establishing the European Higher Education Area and is comparable with similar foreign and domestic higher education programmes.

In the design of goals, competences and learning outcomes for the higher education professional study programme at the first cycle *Physiotherapy*, we relied on the

guidelines of the World Health Organization (WHO), the European Network of Physiotherapy in Higher Education, the World Confederation for Physical Therapy -WCPT), and the European region World confederation for Physical Therapy - ER-WCPT respectively, including the recommendations of the Extended Professional College of Physiotherapy at the Ministry of Health. We also considered the findings of an international transparent study of three comparable foreign higher education study programmes at the first cycle in the field of physiotherapy along with the opinion of a group of experts from practice.

## 3 INFORMATION ABOUT THE INTERNATIONAL COMPARABILITY OF THE PROGRAMME

In performing the international comparability studies of the higher education professional study programme at the 1<sup>st</sup> cycle *Physiotherapy* with foreign related study programmes, we have analysed and compared the following elements of the study programme:

- the formal and substantive structure of the study programme in the field of study and in the context of the scientific disciplines for which the institution is established,
- professional consistency and consistency of the study programme *Physiotherapy* with comparable related foreign programmes,
- name, cycle and type of the proposed study programme,
- concept, formal and content structure of the *Physiotherapy* programme with foreign programmes,
- the basic objectives, the expected learning outcomes of students, and the general and subject-specific competences of graduates,
- access requirements and criteria for the selection of candidates in the event of enrolment restrictions,
- duration of the study, the conditions for advancement, obligations to complete the study and the acquired professional titles,
- curricula (content, name and number of subjects) and course syllabi for individual study units that are in line with the goals of the study programme and enable each student to achieve the planned learning outcomes and competences,
- course syllabi in terms of conditions for inclusion in the course, with description of the content, the list of the basic literature and sources, the description of the objectives and intended learning outcomes, methods of teaching and learning, conditions for the pursuit of study obligations and methods of verifying and assessing knowledge,
- vertical and horizontal integration of the study programme courses,
- share of the elective content or elective courses in the curriculum of the proposed study programme *Physiotherapy* with foreign programs,
- the number of organized joint contact hours of the programme and the ratio between lectures, seminars, tutorials and other forms of contact hours, including the individual student work,
- share of the clinical practice (practice in the clinical environment) in the programme and the manner of its implementation,
- annual and total study obligation, which is evaluated with credit points according to the Criteria for the Credit Evaluation of Study Programmes in accordance with the European Credit Transfer and Accumulation System (ECTS),
- methods and forms of study implementation (system and organisation of the study process, the credit system of the complete programme and individual

learning units, the use of modern information technologies, an independent study, tutoring, organization of practical training),

- assessment methods that allow for proper verification of the achieved learning outcomes and competences, and enable the student's ongoing studies and effective monitoring of their own progress,
- requirements for completion of the study,
- recognition of knowledge, competence and skills acquired prior to enrolment in the study programme with formal, non-formal or experiential learning, which in terms of content and complexity correspond in whole or in part to general or subject-specific competences defined in the proposed study programme, namely in the form of completed study obligations, evaluated according to the ECTS,
- transitions between study programmes,
- placement of the programme in the common European Higher Education Area and facilitating the implementation of international mobility,
- differences between the proposed and foreign programs according to the specific needs and conditions of the domestic economy and public services.

In order to analyse the international comparability of the higher education professional study programme at the first cycle *Physiotherapy*, we examined various related study programs in the European Higher Education Area. As a basis for studying the international comparability of the proposed study programme, we have chosen programmes that are in line with the Bologna guidelines, have an educational tradition and are implemented at recognized higher education institutions. The selected programmes enable students to acquire expertise knowledge and skills to use them in solving complex professional and work problems; as a compulsory component, they include practical training in the clinical environment, develop communication skills in the physiotherapeutic profession and among other medical professions, develop professional criticality and responsibility, initiative and the autonomy of graduates in decision-making and management in the physiotherapeutic profession.

For comparison, we selected Physiotherapy study programmes at the following higher education institutions: Turku University of Applied Sciences (Faculty of Health and Well-being), University of Ostrava (Faculty of Medicine), and University of Lübeck (Lübeck Medical School) (Table1).

0	Study programme	City,	Institution's website
institution		country	
Turku University of	Physiotherapy	Turku,	http://www.turkuamk.fi/fi/
Applied Sciences, Faculty		Finland	
of Health and Well-being			
University of Ostrava,	Physiotherapy	Ostrava,	http://lf.osu.cz/
Faculty of Medicine		Czech	
		Republic	
University of Lübeck,	Physiotherapy	Lübeck,	https://www.uni-
Lübeck Medical School		Germany	luebeck.de/en/university/the-
			university/profile.html

Table 1: Higher education institutions and foreign comparable programmes in Physiotherapy

The higher education professional study programme at the first cycle *Physiotherapy* is an internationally comparable study programme by its concept, formal and contextual structure, prerequisites for enrolment, duration of study, the conditions for completion of

the study, the obtained title, means and forms of study. It is evaluated with ECTS points in accordance with the European credit system (ECTS).

The comparison showed that the programme fulfils all conditions for quality international cooperation (mobility), as well as integration into the common European Higher Education Area and provides an equivalent integration of graduates into the European labour market.

#### 4 ANALYSIS OF THE EMPLOYMENT ENVIRONMENT NEEDS

The employment environment of graduate physiotherapists is broad, as future graduates can be employed at all three levels of health care; especially rehabilitation in health resorts is well developed in the region. In addition, the physiotherapist's profile also has many other options for self-employment.

Graduate physiotherapists can be employed:

- at all levels of health care (health centres, hospitals, rehabilitation centres, institutions, natural health resorts), at the level of health promotion, treatment and rehabilitation,
- in social care institutions (centres for older people, homes for older people, special institutions for adults, social welfare institutions for training children and youth with developmental disorders, etc.),
- in concessioned physiotherapeutic practice,
- in sports centres, societies, health clubs etc., financed with public funds,
- in health promotion institutions,
- in non-profit organisations dealing with society health (e.g. chronic patients' society),
- in public educational and research centres,
- in hospice institutions,
- at ministries, in institutes (Ministry of Health, Ministry of Labour, Family and Social Affairs, National Institute of Public Health, etc.),
- in natural health resorts that carry out rehabilitation activities (self-pay and financed from the Health Insurance Institute,
- in public institutes dealing with the needs of society, healthy and sick population, health management and state policy,
- in schools, including preschools and special education schools,
- in higher education institutions (higher education teachers, researchers), etc.

By increasing awareness of the importance of a healthy lifestyle and preventive disease prevention activities, physiotherapists play an important role in maintaining and improving the quality of life of the population. In order to prevent illness from work as a result of excessive workloads both in the economy and non-economy, in the future, the need for employment and the involvement of physiotherapists into the working environment as advisers in preventing occupational diseases will increase, as they can competently participate in management of active breaks, ergonomic adjustments, as well as in preventive activities in individual companies.

Many physiotherapists continue their career as independent entrepreneurs by setting up their own businesses, where they take over and carry out various educational activities (internationally recognized courses) and work in preventive as well as curative activities in the field of physiotherapy. As such, they can also enter the economy in the framework of health promotion projects, where the employer is legally bound to implement a health promotion policy. Based on the data of the personnel services at participating institutions, we estimate that by 2030 the narrower region needs 90 to 180 new physiotherapists, mainly at the expense of the aging population, and the development of new methods and techniques for maintaining and strengthening health. In addition to health institutions (hospitals, health centres, homes for older people, private practices), there are 6 balneological centres within a distance of 30 km from the faculty.

#### 5 INTERNATIONAL COOPERATION OF THE INSTITUTION

In 2009, the Faculty obtained the Erasmus Charter for Higher Education (ECHE) document for the first time, which represented the basis for international cooperation.

The Faculty actively establishes cooperation with related institutions in Slovenia and abroad.

The Faculty develops its international activity in four areas:

- organization of international scientific conferences: The Faculty organises an annual scientific conference. The main theme of each annual conference is Holistic Approach to the Patient.
- exchange of students and higher education teachers/staff: The Faculty promotes international mobility of students and teachers/staff. In the framework of the Erasmus+ exchange programme, a number of mobility of students and higher education teachers are carried out each year.
- Participation in international scientific-research projects: With our collaborating partner institutions we plan and perform the joint research work.
- individual contacts of pedagogical workers, researchers and associates: Higher education teachers also attend scientific and professional meetings abroad.

All activities related to the international cooperation are coordinated by the International Mobility Office. As we are aware of the fact that the visibility of the Faculty in the framework of the internationalisation is urgently needed, we use various dissemination methods to expand the awareness of the importance of mobility at both local and global level.

#### 6 CURRICULUM AND ECTS (CREDIT POINTS) VALUES

The higher education professional study programme at the first cycle *Physiotherapy* is compliant with the Higher Education Act of the Republic of Slovenia and the standards and criteria of the Slovenian Quality Assurance Agency for Higher Education.

#### 6.1 Credit evaluation of the programme and individual learning units

The higher education professional study programme at the first cycle *Physiotherapy* is evaluated with ECTS in accordance with the European Credit Transfer and Accumulation System (ECTS) framework. The ECTS system enables students to collect and transfer the credit points from one study programme to another as well as recognition of accomplished studies on other institutes of higher education in Slovenia and abroad. It ensures transparency and comparability of systems and study programmes, which is fundamental for mobility of students and recognition of study obligations. A credit point (ECTS) is a unit of measurement for the evaluation of work, which is performed by a student on the average. One credit point is evaluated 25 to 30 hours of the student workload, the annual students workload can be from 1500 to 1800 hours. Parts of the programme are evaluated in accordance with the Criteria: individual course with at least 3 ECTS, a module with at least 5 ECTS and a week of clinical practice with 2 ECTS.

The ECTS Criteria encourage the introduction of teaching strategies that focus on students: the starting point is the workload of a student. The credit points are awarded to the student when the prescribed study obligations are accomplished. The workload of the student consists of: lectures, tutorials and other forms of organized study work (practical training/clinical practice, laboratory exercises, clinical practice, research work, project-based work), individual study work (ongoing work, studying literature, seminar, research and project papers, as well as preparing for exams or other forms of examinations) and a diploma thesis.

#### 6.2 Curriculum and learning units with ECTS

Displayed in the table is the curriculum with the named learning units, credit evaluation of the complete programme and individual learning units, annual or total number of hours of study obligations, as well as the annual and total number of organised contact hours of the programme.

<i>Table 2</i> : Curriculum with ECTS for each learning unit
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Ne	No.			OSW			OSW	ISW	ASW	ECTS
INO.	Course unit	$\mathbf{L}$	Т	LW	CE	CP	USW	15 W	ASW	LUIS
	YEAR 1									
	1 <sup>st</sup> semester									
1.	Anatomy, Physiology and Pathology	90		30			120	120	240	8
	Biochemistry, Pharmacology and									
2.	Radiology	45		5			50	70	120	4
	Functional Anatomy and Physiology									
3.	of the Movement System	75			45		120	120	240	8
	Fundamentals of the Physiotherapy									
4.	Profession	30	30				60	60	120	4
	Motor Development and Physical									
5.	Activity	30	15				45	45	90	3
6.	Emergency Medical Treatment	15			30		45	45	90	3
	2 <sup>nd</sup> semester									
7.	Basics of Clinical Medicine I	60			5		65	85	150	5
	Assessment Methods in									
8.	Physiotherapy	60			60		120	120	240	8
9.	Kinesiotherapy I	45			60		105	105	210	7
10.	Manual Therapy I	15			30		45	45	90	3
11.	Biophysics with Biomechanics	30		15			45	75	120	3
	Research Work Basics and									
12.	Informatics	30	15	15			60	60	1208	4
	TOTAL:	525	60	65	230	0	880	950	1830	60

Abbreviations:

Study obligations: L - lectures, T - tutorials, LW – laboratory work, CE – cabinet exercises, CP = clinical practice, OSW – organised study work, ISW – individual student work, ASW – annual student workload, ECTS = European Credit Transfer System points.

No.	Course unit	Course unit OSW					OSW	ISW	ASW	ECTS
	YEAR 2	$\mathbf{L}$ $\mathbf{T}$ $\mathbf{LW}$ $\mathbf{CE}$ $\mathbf{CP}$ $\mathbf{OS}$		USW	15 W	ASW	LUIS			
	3 <sup>rd</sup> semester									
1.	Basics of Clinical Medicine II	60	15				75	75	150	5
2.	Manual Therapy II	45			75		120	120	<b>240</b>	8
3.	Foreign Language for Specific Purposes (English/German)	15	30				45	45	90	3
4.	Kinesiotherapy II	30			45		75	75	150	5
5.	Cardiovascular and Pulmonary Physiotherapy	45			45		90	90	180	6
6.	Methods of Communication	30	15				45	45	90	3
	4 <sup>th</sup> semester									
7.	Clinical Practice	<b>5</b>				240	245	0	245	12
8.	Geriatric Physiotherapy	15			30		45	45	90	3
9.	Psychology	30	15				45	45	90	3
10.	Instrumental Physiotherapy	30			45		75	75	150	5
11.	Balneotherapy	15			30		45	45	90	3
12.	Elective course (general)	30	30				60	60	120	4
	TOTAL:	350	105	0	270	240	965	720	1685	60

	Course unit			OSW			OGW		ACITZ	ECTA
No.	YEAR 3	$\mathbf{L}$	Т	LW	CE	CP	OSW	ISW	ASW	ECTS
5 <sup>th</sup> semester										
1.	Neurophysiotherapy	45			60		105	105	210	7
2.	Physiotherapy for Women's Health	30			30		60	60	120	4
3.	Ergonomics	30	15				45	45	90	3
4.	Rehabilitation in Sport	30			30		60	60	120	4
5.	Elective course (general)	30	30				60	60	120	4
6.	Clinical Practice	5				160	165	0	165	8
	6 <sup>th</sup> semester									
7.	7. Rehabilitation		15				45	45	90	3
	Physiotherapy in Orthotics and									
8.	Prosthetics	15			30		45	45	90	3
9.	Elective course (professional)	30			45		75	75	150	5
10.	Elective course (professional)	30			45		75	75	150	5
11.	Clinical Practice					160	160	0	160	8
12.	Diploma Exam	5					5	175	180	6
	TOTAL:	280	60	0	240	320	900	745	1645	60
			1	1	1	1			1	1
OVERV	/IEW	$\mathbf{L}$	Т	LW	CE	CP	OSW	ISW	ASW	ECTS
year 1		525	60	65	230	0	880	950	1830	60
year 2		350	105	0	270	240	965	720	1685	60
year 3		280	60	0	240	320	900	745	1645	60
TOTAL			225	65	740	560	2745	2415	5160	180

The substantive concept of the higher education professional study programme at the first cycle *Physiotherapy* consists of five basic areas in which individual courses/ learning units are placed, namely professional subjects of special branches of physiotherapy, basic natural sciences, basic social sciences, elective subjects and clinical training.

*Professional subjects in the field of physiotherapy* represent the core of the study programme (48.3%) and enable the acquisition of basic professional knowledge and physiotherapeutic skills in the field of evaluation of human movement and functional abilities, physical therapy, manual therapy, kinesiotherapy and individual special branches of physiotherapy, such as cardiovascular and respiratory physiotherapy, physiotherapy in orthotics and prosthetics, physiotherapy for women's health and neurophysiotherapy. Courses are obligatory content of the study programme.

The basic subjects in the field of medical/natural sciences and basic subjects in the field of social sciences represent 22.78% of the study programme, with an equal distribution between natural and social sciences. The learning units in the field of medical/natural sciences enable the acquisition of knowledge in basic medical and natural science disciplines such as Anatomy, Physiology, Pathology, Pharmacology and Basics of Clinical Medicine (internistics, orthopedics, surgery, traumatology, first aid, pediatrics, gynecology, geriatrics, psychiatry, neurology ). Within the natural science courses, basic subjects of health sciences are also being performed, such as Biophysics with Biomechanics, Biochemistry and Radiology, and Ergonomics. Courses are obligatory content of the study programme.

The learning units in the field of social sciences enable the student of physiotherapy to acquire knowledge in the field of foreign language, the basics of research, communication with the patient and psychology. Courses are obligatory content of the study programme.

Elective section of the study programme. The elective section of the programme represents 18 ECTS (10%) of the study programme. In the elective section, the student can upgrade and deepen his/her knowledge in special areas of physiotherapy and in other interdisciplinary professional areas, according to his/her own interest. Each student chooses four elective courses, namely two general electives (one in the second and one in the third year - 8 ECTS in total) and two professional electives in the third year of studies (10 ECTS).

Clinical training represents 15.56% of the study programme; it is performed in a direct clinical environment, in hospitals and other medical institutions, in the second and third year of study. It lasts 14 weeks or 560 hours, equivalent to 28 ECTS. Before performing clinical training, cabinet exercises are planned in a simulated clinical environment (cabinets) in each specific field of physiotherapy.

Students finish their studies with the diploma exam (6 ECTS). The purpose of the diploma exam is verification and assessment of the objectives, learning outcomes and competences achieved upon completion of the studies. The methods of verification and assessment at the diploma exam are: oral examination, practical examination of basic physiotherapeutic competences and case study - written paper.

#### 6.3 Learning units and their inclusion in the programme structure

The programme consists of 180 credit points. The study programme includes organised work and individual study work, which is 5160 hours. It lasts for three years. It is

formed of 28 common obligatory courses, 4 elective courses (two general and two professional electives), three (3) units of clinical training, and the diploma exam. The learning units are implemented as organised study work and include lectures, tutorials, laboratory work, clinical exercises and clinical practice.

Individual study work consists of ongoing work, studying literature, seminar, research and project papers, as well as preparing for exams or other forms of examinations and diploma exam.

#### 6.3.1 Elective courses

Elective courses are available in the second and third year. Each student chooses two general elective courses (one in the second and one in the third year -8 ECTS in total) and two professional elective courses in the third year of studies (10 ECTS).

With elective courses 18 ECTS can be obtained or 10 % of the obligatory study work. They allow individual designing of the study regarding wishes of individual students. The curriculum of the sixth semester gives optimal possibilities for international mobility of students.

		OS	SW				
No.	Learning unit	$\mathbf{L}$	Т	OSW	ISW	ASW	ECTS
	Healthcare and Social Care						
1.	Legislation	30	30	60	60	120	4
2.	Hygiene with Ecology	30	30	60	60	120	4
	Writing Professional and						
3.	Scientific Articles	30	30	60	60	120	4
4.	Personal and Professional Development with Supervision	30	30	60	60	120	4
	Safety and Quality in						
5.	Healthcare	30	30	60	60	120	4
	Prevention and Control of						
6.	Noscomial Infections	30	30	60	60	120	4

*Table 3:* General elective courses of the higher education professional study programme *Physiotherapy* 

Table 4: Professional elective courses of the higher education professional study programme *Physiotherapy* 

		OS	SW				
No.	Learning unit	$\mathbf{L}$	CW	OSW	ISW	ASW	ECTS
1.	Manual Therapy III	30	45	75	75	150	5
2.	Healthy Lifestyle Strategies	30	45	75	75	150	5
3.	Chronic Pain Management	30	45	75	75	150	5
	Didactics of Physical/Sports						
4.	Education	30	45	75	75	150	5
	Preparation in Recreation and						
5.	High-Performance Sport	30	45	75	75	150	5
6.	Philosophy of Sport	30	45	75	75	150	5
7.	Thermal Treatment	30	45	75	75	150	5
8.	Physiology in Sport	30	45	75	75	150	5

#### 6.3.2 Electiveness within the study programme

The relations between obligatory and elective units in the higher education professional study programme *Physiotherapy* are defined in accordance with Article 6 of the Criteria for Credit Assignment to Study Programmes According to ECTS, taking into account the characteristics of the study/research field, the cycle and type of the study programme and its internal sections.

The programme enables students to realise their own academic pathways. Students can select among elective courses offered by the Faculty – internal selection. In accordance with the ECTS criteria, part of the elective content can be performed at the institutions with which the faculty has an agreement - an external choice.

The elective part of the programme comprises two general elective courses in the  $2^{nd}$  and  $3^{rd}$  year of studies (8 ECTS) and two professional elective courses in the  $3^{rd}$  year of studies (10 ECTS).

The *common obligatory section of the programme* includes 162 ECTS or 90 % and the *elective section* includes 18 ECTS or 10 %. Students can complete elective units at the Faculty or in another institution in Slovenia or abroad

*External selection* is possible with elective courses in the second and third year.

Students can decide to accomplish a part of the study programme in the scope of mobility at a similar foreign institution, with which the Faculty has signed a bilateral agreement.

#### 6.4 The ratio of lectures, tutorials and other organised forms of study

	Theoretical		Practical						
	e	ducatio	n	educ	ation				
	$\mathbf{L}$	Т	LW	CW	CP	OSW	ISW	ASW	ECTS
1. YEAR	525	60	65	230	0	880	950	1830	60
2. YEAR	350	105	0	270	240	965	720	1685	60
3. YEAR	280	60	0	240	320	900	745	1645	60
TOTAL	1155	225	65	740	560	2745	2415	5160	180
TOTAL IN %	22,38	4,36	1,26	14,34	10,85	53,20	46,80	100	
TOTAL in hours	1445		1300			2415	5160		
TOTAL IN %		28,00		25,20			46,80	100	

Table 5: Share of lectures, seminars, tutorials and other organised forms of study

Higher education professional study programme at the first cycle *Physiotherapy* comprises **5160 hours**, (ASW), which makes 28.67 hours per 1 ECTS on the average. The theoretical part consists of 1445 hours or 28.00%, from which 22.38% are lectures, 4.36% tutorials and 1.26% laboratory work. The practical training comprises 740 hours of cabinet exercises and 560 hours of practice in the clinical environment. The share of the organized study work is 53.20%, and 2415 hours or 46.80% is intended for individual student work.

Annual student workload (AWS) consists of *organized study work*, conducted in the forms of lectures, tutorials, laboratory work, cabinet exercises and clinical practice, and of *individual study work* (ongoing work, studying literature, seminar papers, project and

research work, preparation for exams or other forms of examinations, as well as preparation for the diploma exam).

#### 6.5 Practical training within the programme, implementation and ECTS

Practical training directly in the clinical setting is, in accordance with the 33rd Article of the Higher Education Act, the obligatory part of the study programme on the first cycle for obtaining the higher professional education.

740 hours in simulated clinical environment / cabinets (14.34%) and 560 hours in the immediate clinical environment (10.86%) are allocated to practical training in the higher education professional study programme at the first cycle *Physiotherapy*.

Practical education in the first year is carried out exclusively in the simulated clinical environment, while in the second and third year of study, students attend practical training at learning institutions - in a real clinical environment. When planning the scope and manner of practical education, we considered the findings obtained from the study of international comparability with foreign related programs, and comparison with Slovenian programs. At the faculty, cabinet exercises are conducted in a simulated clinical environment in all professional physiotherapy subjects in all three years. The scope is anticipated with the curriculum, and the content with the syllabus of each learning unit. Practical training in a direct clinical environment takes place in the second and third year in the scope of 28 ECTS or 14 weeks. Credit points were determined according to the ECTS Criteria - one week of clinical training (40 hours) is evaluated with 2 credit points.

Clinical training will be performed in four basic areas of the physiotherapist's work during clinical training, namely in spas, hospitals (various departments, including intensive care units), health centres (including private practice and developmental clinic) and homes for older people. To get acquainted with specific special areas of physiotherapy (e.g. physiotherapy in orthotics and prosthetics), the faculty will organize an excursion to the institution with expertise in these areas.

The purpose of the clinical practice is the education of future nursing staff in real working/clinical environment, transfer of knowledge from higher education institutions in the immediate work environment and back, and the adaptation of the study programme to the needs of the clinical environment. Clinical practice is an organised part of the study programme.

Before going to clinical practice, students attend clinical exercises in cabinets which are preparation for their work in the direct clinical environment. At cabinet exercises students consolidate their knowledge, develop the necessary skills and competences. They also obtain detailed information on clinical practice, organisation, schedule, take note of the Rules of the clinical practice, receive instructions for the fulfilment of the clinical documentation, information on assessment of knowledge, about their rights and obligations, etc.

Clinical practice is fully organised by the Faculty. Students in cooperation with the head of the clinical training (higher education teacher employed at the Faculty) contact the learning institution, where they will perform their clinical practice. Clinical training is performed under the leadership of the clinical mentor who has at least higher education and is qualified for implementing a mentor work. The mentor grants the work to students on the basis of the clinical practice programme; mentors inform, guide, direct, monitor and assess students. The head of the clinical training monitors the practice and if necessary, advises the student or the clinical mentor.

The students record all the activities of clinical practice and hand the documents in to the head of the clinical training after they are finished with the practice.

A part of the clinical practice can be performed abroad in the scope of the Erasmus<sup>+</sup>programme. The international mobility of the students is organised and guided by the International Office along with the institutional coordinator regarding the ECTS transfer.

#### 7 ACCESS REQUIREMENTS AND CRITERIA FOR THE SELECTION OF CANDIDATES IN THE EVENT OF ENROLMENT RESTRICTIONS

#### 7.1 Access requirements

The prerequisite for enrolment in the first year of study (on the basis of the 38th Article of the Higher Education Act):

- the matura examination or the vocational matura examination;
- an accomplished final exam on any four-year secondary school programme.
- an accomplished final exam before 1 June 1995 on any four-year secondary school programme.

The selected candidates must submit a medical certificate upon enrolment to perform work and tasks of a graduate physiotherapist; the certificate is issued by Clinical institute for medicine of work, traffic and sport.

#### 7.2 Criteria for the selection of candidates in the event of enrolment restriction

In the event of enrolment restriction, the candidates are selected according to:

- a.) their overall achievement in the matura examination, the vocational matura examination or the final examination (up to to 60% of points)
- b.) the overall achievement in the third and fourth year (up to 40% of points).

Upon entry, the selected candidates shall be required to submit a medical certificate regarding their ability to perform work and tasks of a graduate physiotherapist. The candidate receives a referral for the preliminary physical examination and the notification of enrolment by post. Preliminary preventive physical examinations are performed at the dispensaries of occupational, traffic and sports medicine in Slovenia.

#### 8 CRITERIA FOR RECOGNITION OF SKILLS AND COMPETENCES GAINED BEFORE THE ENROLMENT

The recognition of skills and competences gained before enrolment in the study programme is regulated by the Rules on recognition of skills and competences, which are publicly available on the faculty's website. The competent committee decides on the recognition of knowledge gained before enrolment.

#### 9 VERIFICATION AND ASSESSMENT OF KNOWLEDGE

The verification and assessment of the knowledge of students is designed in the way that enables students and higher education teachers to have constant and quality information on the progress and achievement of the set objectives / competences of the study programme. The study programme requires students to work on a regular basis, therefore the assessment of knowledge is diagnostic, formative and summative. The verification and assessment process is carried out regularly before, during and after the completion of individual courses.

The methods of verification and assessment of knowledge are defined in the syllabuses for individual courses and conform to the verification of achieving planned objectives, expected student performance and the development of general and course-specific competences.

To ensure the diversity of learning and teaching methods as well as validity, reliability and objectivity, higher education teachers use different combinations of verification and assessment in individual courses.

Verification and assessment include all taxonomic domains and all taxonomic levels, whereby we are interested in the quality of structure and the organisation of knowledge.

The envisaged methods of verification and assessment are: exams, partial exams, midterm tests, tests, essays, seminar/project papers, oral presentations, clinical (cabinet) exercises, practical tasks, portfolio, actual problem-solving, logs/diaries, research papers, physiotherapeutic documentation, written reports on clinical practice and the diploma exam.

The fulfilment of the student's obligations is assessed in accordance with the Rules on the Assessment of Knowledge, which are publicly available on the faculty's website.

	Grade Grade according to ECTS Criteria		Criteria in %	Description of knowledge	
10	odlično	А	excellent	95 %- 100 %	Outstanding performance with only minor errors
9	prav dobro	В	very good	85 %- 94 %	Above-average standard but with some errors
8	prav dobro	С	good	71 %- 84 %	good knowledge
7	dobro	D	satisfactory	61 %- 70 %	fair knowledge but with significant shortcomings
6	zadostno	Е	sufficient	55 %- 60 %	knowledge meets the minimum criteria
5-1	insufficient	F	fail	0 %- 54 %	knowledge does not meet the minimum criteria
*	successful	L	successful		knowledge meets the criteria
*	unsuccessful	F	unsuccessful		knowledge does not meet the minimum criteria

In the evaluation the teacher typically involves the individual student or group of students, while encouraging critical evaluation of their own work, their contribution to the common product, and the evaluation of the work of their peers.

Verification and assessment methods including criteria for the final grades are explained in the individual course syllabus. Every teacher informs the students of the course plan and study obligations or shares held by the individual components of the verification and assessment of knowledge and skills contributing to the final grade of the course subject.

#### 10 PROGRESSION REQUIREMENTS FOR THE PROGRAMME

A student may progress to a higher year if by the end of a study year he/she has completed all the requirements set by the study programme for enrolment in the next year.

Students progress to *the second year* if the obligations of the first year are met to the extent of at least 50 ECTS and if all the requirements of the tutorials and the clinical practice defined in the programme are fulfilled. In order to progress to the second year, students should fulfil all the requirements for the following courses:

- Anatomy, Physiology and Pathology,
- Functional Anatomy and Physiology of the Movement System,
- Basics of Clinical Medicine I,
- Assessment Methods in Physiotherapy,
- Biophysics with Biomechanics,
- Kinesiotherapy I,
- Manual Therapy I.

Students progress to *the third year* if the obligations of the first year are met (60 ECTS), and if the obligations of the second year are met to at least 50 ECTS, and if all the requirements of the tutorials and the clinical practice defined in the programme are fulfilled. In order to progress to the third year, students should fulfil all the requirements for the following courses:

- Basics of Clinical Medicine II,
- Manual Therapy II,
- Kinesiotherapy II,
- Cardiovascular and Pulmonary Physiotherapy,
- Geriatric Physiotherapy,
- Instrumental Physiotherapy.

**Progression to next year with no accomplished obligations:** By way of exception, students can enrol in a higher year, even if they have not reached the required credits when they have justifiable reasons for doing so. For justifiable reasons shall be considered the reasons laid down in the Statute of the University of Novo Mesto Faculty of Health Sciences.

#### 11 PROVISIONS ON TRANSFERS BETWEEN STUDY PROGRAMMES

Transfers between study programmes are regulated by the valid Criteria for Transfers between Study Programmes (Official Gazette of the RS, No. 14/19) adopted by the council of SQAA.

A transfer between study programmes means termination of education in the first study programme and continuation of studies in another study programme (Article 2 of the Criteria for Transfers between Study Programmes).

In accordance with the Criteria for Transfers between Study Programmes, transfers are possible between study programmes accredited in Slovenia or implemented in the countries of the European Union, which at the end of studies provide for the acquisition of comparable competences, among which at least half of the European Credit System (ECTS) from the first study programme can be recognised and related to the compulsory subjects of the second study programme (The Criteria for Recognition).

#### On transfers between programmes, the following criteria apply:

- fulfilling the requirements for enrolment in the new study programme,
- the number of available places,
- comparable study requirements which the student has successfully completed in the first study programme.

In accordance with the conditions stipulated in the Higher Education Act, Criteria for Transfers between Study Programmes (Official Gazette of the Republic of Slovenia, No. 95/2010, 17/2011) and other regulations, transfers are possible in the following ways:

- *between study programmes of the same cycle*. The transfer is possible from study programmes in the field of physiotherapy, accredited in Slovenia or performed in the countries of the European Union,
- *between short-cycle professional programmes and first-cycle study programmes* in the field of physiotherapy,
- in the case of non-Bologna study programmes adopted before 11 June 2004: until termination of these programmes, transfers between university and higher professional study programmes, and from these programmes to study programmes at the first or second cycle, are also possible.

Fulfilment of the prescribed conditions for recognition and determination of the missing or additional obligations, which were accomplished by the student in the previous programme, is decided by a relevant recognition committee, which, depending on the scope of recognized obligations, determines the year into which the student transfers.

#### 12 MODES OF STUDY

At University of Novo mesto Faculty of Health Sciences, the higher education professional study programme at the first cycle *Fizioterapija* is implemented as full-time and part-time

study. Both modes are equivalent. The study is performed according to the valid normatives and the study calendar.

*Remote study (e-study) or a combined form of study:* We are not planning this form of study. The nature of the field of study requires direct work with students. The decision of the senate will exceptionally determine the form of distance learning for individual study units or parts of study units of the program.

#### 13 REQUIREMENTS FOR COMPLETION OF THE STUDY

Requirements for completion of the study are successful fulfilment of all study obligations defined by the programme and successfully accomplished diploma exam. Students complete their study once they collect all 180 ECTS anticipated with the study programme.

If the student enrolled in the higher education professional study programme at the first cycle *Physiotherapy* in accordance with the Criteria for Transfers between Study Programmes, they must complete all of the programme's stipulated study obligations and collect at least 60 ECTS. The rest of obligatory credit points (up to 120 ECTS) can be obtained from other educational institutions, by mobility at home or abroad, or obtained through the recognition of knowledge and skills acquired prior to enrolment in the higher education professional study programme at the first cycle *Physiotherapy*.

#### 14 PROFESSIONAL TITLE

Upon completion of the higher education professional study programme at the first cycle *Physiotherapy*, the student acquires the professional title in accordance with the Professional and Academic Titles Act:

- for women diplomirana fizioterapevtka (VS), abbreviated dipl. fiziot. (VS),
- for men diplomirani fizioterapevt (VS), abbreviated dipl. fiziot. (VS).

In accordance with Article 32 of the Higher Education Act and the provisions of the Rules on Diploma Supplement, University of Novo Mesto Faculty of Health Sciences shall issue a diploma supplement to each graduate of the higher education professional study programme at the first cycle *Physiotherapy*.

Marjan Blažič, PhD, Acad. Prof., Rector

