Table S.2.6.-04 Information lists for the Bachelor of Applied Studies in Professional Physiotherapy Programme

Study program
Bachelor Applied Studies
(Undergraduate Professional Studies)

PROFESSIONAL PHYSIOTHERAPY

COURSE BOOK

(All courses are listed alphabetically for easier navigation)

Schedule of courses by semesters and years of study for the Bachelor of Applied Studies in Professional Physiotherapy Programme

Note: A separate column for clinical (professional) practice has been added to the table in order to demonstrate compliance with EU Directive 2005/36, which, among other requirements, specifies a mandatory number of these hours.

Abbreviations used in the table:

1) abbreviations for teaching activities: **theor lect** = theoretical lectures; **exer** = theoretical exercises; **other** = other forms of teaching (individual work with students, project work...); **prof pract** = professional (clinical) practice
2) abbreviations for mandatory/elective courses: **MCCMM** = Mandatory Common Course for Multiple Modules; **MMC =** Mandatory Module Course; **ECCMM =** Elective Common Course for Multiple Modules
3) abbreviations course type: **ag** = academic-general education; **p** = professional; **pa** = professional-applicative

Table S.2.6.-01 Schedule of courses by semesters and years of study

No.	Course Code	Course Name		Active Lessons			clinical pract.[1)]	ECTS	M/E Course[2)]	Course type[3)]
				theor. lect.[1)]	exer.[1)]	other.[1)]				
THE FIRST YEAR										
1	pft-01	Anatomy and Physiology		45	15	0	0	10	MCCMM	AG
2	pft-02	Basics of Nursing		30	15	0	150	8	MCCMM	P
3	pft-03	Basics of Information and Communication Technologies		30	30	0	0	5	MCCMM	P
4	pft-04	Ethics in Health Care		30	30	0	0	5	MCCMM	AG
5	pft-izb-01	Elective Course 1		30	30	0	0	5	ECCMM	
5a	pft-izb-01-a	Business Communication Skills		30	30	0	0	5	ECCMM	PA
5b	pft-izb-01-c	Medical and Pharmaceutical Waste		30	30	0	0	5	ECCMM	P
5c	pft-izb-01-g	Specialized English for Medicine 1		30	30	0	0	5	ECCMM	AG
6	pft-05	Hygiene with the Basics of Microbiology and Parasitology		30	30	0	330	5	MCCMM	P
7	pft-06	Biophysics with Biomechanics		15	45	0	0	5	MCCMM	PA
8	pft-07	Physiotherapy Assessment and Skills with Physical Factors in Therapy		60	75	0	420	12	MCCMM	P
9	pft-izb-02	Elective Course 2		30	30	0	0	5	ECCMM	
9a	pft-izb-02-a	Health Care Education Methodology and Health Promotion		30	30	0	0	5	ECCMM	AG
9b	pft-izb-02-b	Organization of Health Care Systems		30	30	0	0	5	ECCMM	P
Total number of active classes and ECTS per year:				**300**	**300**	**0**		**60**		
Total clinical practice classes/year:							**900**			

THE SECOND YEAR									
10	pft-08	Pathophysiology	45	30	0	0	6	MCCMM	P
11	pft-09	Basics of Internal Medicine	45	15	0	0	5	MCCMM	P
12	pft-10	Basics of Pediatrics	30	15	0	0	5	MCCMM	P
13	pft-11	Clinical Kinesiology	15	45	0	0	5	MCCMM	P
14	pft-12	First Aid	30	30	0	0	5	MCCMM	PA
15	pft-izb-03	Elective Course 3	30	30	0	0	5	ECCMM	
15a	pft-izb-03-a	Human Resources Management in Health Care	30	30	0	0	5	ECCMM	PA
15b	pft-izb-02-c	Public Health	30	30	0	0	5	ECCMM	AG
15c	pft-izb-03-d	Specialized English for Medicine 2	30	30	0	0	5	ECCMM	AG
16	pft-13	Clinical Kinesitherapy	15	45	0	300	8	MCCMM	PA
17	pft-14	Physiotherapy in Internal Medicine	15	15	0	150	5	MCCMM	PA
18	pft-15	Physiotherapy in Pediatrics	15	15	0	150	5	MCCMM	PA
19	pft-16	Manual Therapy	30	30	0	300	6	MCCMM	PA
20	pft-izb-04	Elective Course 4	30	30	0	0	5	ECCMM	
20a	pft-izb-04-a	Marketing of Health Care Institutions	30	30	0	0	5	ECCMM	P
20b	pft-izb-04-b	Pharmacology and Drug Dosing	30	30	0	0	5	ECCMM	P
Total number of active classes and ECTS per year:			**300**	**300**			**60**		
Total clinical practice classes/year:						**900**			

THE THIRD YEAR									
21	pft-17	Basics of Surgery with Orthopedics	30	15	0	0	5	MCCMM	S
22	pft-18	Basics of Neurology and Physiotherapy in Neurology	45	45	0	150	7	MCCMM	SA
23	pft-20	Physiotherapy in Surgery	30	45	0	300	3	MCCMM	SA
24	pft-mod-01	Mandatory Module Course 1	45	45	0	0	10	MMC	S
24b	pft-mod-01-a	MODULE Medical Rehabilitation: Medical Rehabilitation	45	45	0	300	10	MMC	SA
24b	pft-mod-01-b	MODULE Physiotherapy in Sports Medicine Sports Medicine	45	45	0	300	10	MMC	SA
25	pft-izb-05	Elective Course 5	30	30	0	0	5	ECCMM	
25a	pft-izb-05-a	Mental Hygiene	30	30	0	0	5	ECCMM	S
25b	pft-izb-01-e	Geriatrics with Nursing in Geriatrics	30	30	0	0	5	ECCMM	S
25c	pft-izb-05-e	Business English	30	30	0	0	5	ECCMM	OO
26	pft-21	Basics of Rheumatology and Physiotherapy in Rheumatology	45	30	0	150	7	MCCMM	SA
27	pft-19	Psychology in Nursing and Health Care	15	30	0	0	3	MCCMM	OO

28	pft-mod-02	Mandatory Module Course 2	30	30	0	0	5	MMC	S
28a	pft-mod-02-a	MODULE Medical Rehabilitation: Balneotherapy	30	30	0	0	5	MMC	SA
28b	pft-mod-02-b	MODULE Physiotherapy in Sports Medicine Sports Activities of Persons with Disabilities	30	30	0	0	5	MMC	SA
29	pft-izb-06	Elective Course 6	30	30	0	0	5	ECCMM	
29a	pft-izb-06-a	Quality Control	30	30	0	0	5	ECCMM	S
29b	pft-izb-06-b	Research Methodology	30	30	0	0	5	ECCMM	S
30	pft-22	Degree Paper	0	0	300	0	10	ECCMM	S
Total number of active classes and ECTS per year:			**300**	**300**	**300**		**60**		
Total clinical practice classes/year:						**900**			
Total number of active classes and ECTS for the study program:			**2.100**				**180**		
Total clinical practice classes for the study program:						**2.700**			
TOTAL number of active classes + clinical practice classes and ECTS for the study program:			**4.800**				**180**		

ANATOMY AND PHYSIOLOGY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Anatomy and Physiology					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-01	mandatory	first	10	lectures	45
				exercises	15
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Acquisition of knowledge on organ and human body system morphology. Familiarity with and understanding normal anatomical and histological structures and notions. Acquisition of knowledge in the area of cell, tissue, organ system and human organism physiology aimed at understanding the changed, pathological functioning and treatment possibilities. Knowledge of and understanding the role of organ control mechanisms, as well as understanding connection between regulatory systems in human organism. Provision of theoretical basis required for learning other courses.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Basic anatomical terminology. Body areas and parts. Upper extremities. Bones, joints, muscles, blood vessels and nerves.				
Week II	Lower extremities. Bones, joints, muscles, blood vessels and nerves. Rib cage. Walls, division and content of the thoracic cavity.				
Week III	Lungs and pulmonary pleurae. Heart. Mediastinum organs. Abdomen. Walls, division and content of abdominal cavity.				
Week IV	Peritoneum. Peritoneal cavity (liver, stomach, spleen, pancreas, small intestine and large intestine). Retroperitoneal space (kidney, adrenal gland, aorta, inferior vena cava, celiac plexus).				
Week V	Pelvis. Wall and content. Urinary bladder, rectum, male and female reproductive system. Pelvic diaphragm.				
Week VI	Head and neck. Head and facial bones. Head and neck muscles. Head and neck large blood vessels and nerves. Central nervous system.				
Week VII	Human physiology study. Transport through cell membrane. Intercellular communication.				
Week VIII	Explicitation physiology. Membrane potential of inactivity. Action potential. Nervous impulse transmission.				
Week IX	Skeletal muscle physiology. Neuro muscular sinapse. Morphophysiological characteristics of skeletal muscles.				
Week X	Smooth muscle physiology. Characteristics of smooth muscle tissue structure, types, innervation, electrical activity of smooth muscles, specific features of contraction.				
Week XI	Central nervous system organization. Nerve cell. Hematoencephalic barrier, cerebrospinal fluid, composition and function.				

Week XII	Spinal cord. Medulla oblongata. Midbrain. Functional characteristics; reticulo-cortical relations, decerebration rigidity and skeletal muscle tone.
Week XIII	Cerebellum, structure and function. Diencephalon. Hypothalamus. Vegetative nervous system. Basal ganglia. Cerebral cortex.
Week XIV	Senses. Definition, importance and general principles of sensory systems. Sense of hearing and balance.
Week XV	Sense of taste and smell. Eyesight. Pain perception. Introductory notes in pathophysiology.

Methods of teaching:
lectures and practical exercises with anatomical and hystological devices, use of atlas, video projections, computer animations and simulations of physiological processes.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:

1. Stojšić-Džunja Lj.: Anatomija za studente zdravstvene nege, udžbenik, Medicinski fakultet, Novi Sad, 2017
2. Stefanović N.: Anatomija čoveka za studente farmacije, udžbenik, Medicinski fakultet, Niš, 2005
3. Veličković D.: Fiziologija za studente farmacije, udžbenik, Medicinski fakultet, Niš, 2013
4. Mitrović D. M., Mazić S. D., Petrović M. M.: Osnovi fiziologije čoveka, udžbenik, Medicinski fakultet, Beograd, 2011

Recommended Literature:

5. Mihalj M.: Anatomija čoveka, udžbenik, Medicinski fakultet, Novi Sad, 2006
6. Mačvanin Đ.: Anatomija, udžbenik, Fakultet za menadžment u sportu, Beograd i Matica srpska, Novi Sad, 2005
7. Milisavljević M. i sar.: Klinička anatomija, udžbenik, Nauka, Beograd, 2004
8. Mujović i sar.: Medicinska fiziologija, udžbenik, Medicinski fakultet, Kosovska Mitrovica (Priština), 2004
9. Stanić V., Maličević Ž. i sar.: Grudna hirurgija (ur.: Jaković R. M.), udžbenik, Medicinski fakultet, Beograd, 2004
10. Despopoulos A., Silbernagl S.: Fiziološki atlas u boji za studente medicine, Medicinski fakultet, Niš, 2007
11. Guyton A. C., Hall J. E.: Medicinska fiziologija, Savremena administracija, Beograd, 2006
12. Netter F. H., Machado, C. A. G.: Atlas of Human Anatomy & CD, Mala velika knjiga, Novi Sad, 2005
13. Drake R., Wayne A., Mitchell A.: Gray's Anatomy for Students, Elseivier, London, 2020
14. Moore K. L., Dalley A. F., Agur A. M. R.: Clinically Oriented Anatomy, Lippincott Williams & Wilkins, New York, 2013
15. Arroyo J. P.: Back to Basics in Physiology Academic Press, London, 2013
16. Silverthorn D. U.: Human Physiology, Pearson/Benjamin Cummings, London, 2004

Course outcome (aligned with the study program outcomes):
Capability of defining, describing, integrating and reproducing notions relating to normal anatomical and histological structures. Upon the completion of the course and passing the exam students will: have a command of the corresponding part of medical nomenclature, be able to explain functioning of individual organs and organ systems, will be familiar with and will understand integrated functions of individual organs and the role of organism control mechanisms and they will know and understand the connection of the regulatory system of human organism enabling its adaptation to changes in internal and external environment under everyday conditions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points

attendance at lectures	3	exam	20 (anatomy) 20 (physiology)
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	10 (anatomy) 10 (physiology)	-	-
midterms	15 (anatomy) 15 (physiology)	-	-
Full name of the lecturers and teaching associates:			
Lecturer:	Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery Ivana Kaćanski, PhD, Professional Studies Professor		
Teaching Associate:	Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery		
Specific features that need to be emphasized for the course: no			
Note (if applicable): no			

BALNEOTHERAPY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Balneotherapy					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-mod-02-a	mandatory	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Introduction of students to the basics of balneology (mineral waters, peloids, medicinal gases) and human bioclimatology (medical meteorology, medical climatology, biological rhythms), as well as to the basic regimens and therapeutic measures used in balneoclimatic treatment.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Basics of balneology: egimens and therapeutic measures in balneoclimatic treatment.				
Week II	Mineral waters in balneoclimatic treatment.				
Week III	Peloids in balneoclimatic treatment.				
Week IV	Medicinal gases in balneoclimatic treatment.				
Week V	Medical meteorology.				
Week VI	Meteoropathology and preventive measures for meteorotropism.				
Week VII	Medical climatology.				
Week VIII	Climatic factors.				
Week IX	Climatoprophylaxis.				
Week X	Climatotherapy.				
Week XI	Biological rhythms – daily and annual.				
Week XII	Application of balneology in spa and health resorts.				
Week XIII	Directions of development in balneology.				
Week XIV	Basics of quantum medicine.				
Week XV	Balneology as part of integrative medicine. The relationship between balneology and other medical methods.				
Methods of teaching: Lectures, exercises, case study, e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:
Required Literature
1. Jovanović T., Janjić M., Popović G., Conić S.: Balneoklimatologija, udžbenik, Cibif, Beograd, 1995
Recommended Literature:
2. Russell J., Cohn R.: Balneotherapy, Book on Demand, New Jercy, 2012

Course outcome (aligned with the study program outcomes):
Acquisition of medical awareness and humane principles in the use of natural spa resources, acquisition of knowledge in bioclimatology from the perspective of its impact on human health for preventive and therapeutic purposes, mastery of the application of mineral waters, peloids, and medicinal gases for prevention and treatment, as well as acquiring skills in evaluating and selecting patients for the use of natural balneological and climatic resources.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Ljubica Nikčević Krivokapić, PhD, Professional Studies Professor, Specialist in Physical Medicine and Rehabilitation
Teaching Associate:	Zoran Tešić, Teaching Associate, Specialist in Applied Physiotherapy

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BASICS OF INFORMATION AND COMMUNICATION TECHNOLOGIES

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Information and Communication Technologies					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-03	mandatory	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Course objective is to enable students to acquire basic knowledge in the area of application of information-communication technologies in health care institutions, familiarizing with text processing software tools and with tabular calculations computer programs.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Organization of information technology service in health care institution.				
Week II	Types of information systems.				
Week III	Information systems within health care system. Acquisition and acceptance of new information systems in health care, need for continuous updating.				
Week IV	Work of health care worker within IT system.				
Week V	Professional equipment. Computer networks, basics of telecommunications, and types of telecommunication systems. Software.				
Week VI	Basics of system analysis. System functioning testing. Standards of information technologies system in health care.				
Week VII	Patient recording. Importance of permanent and timely entry of data into system.				
Week VIII	Connection of the system with other national systems. Unique system of patient tracking.				
Week IX	Trends of connecting health care institutions system with pharmaceutical systems.				
Week X	Patient data protection.				
Week XI	The Internet, internet address, internet access, internet protocols, HTML, World Wide Web, internet services. Windows.				
Week XII	Specific program used in pharmacy practice.				
Week XIII	Basic program languages used by health care professionals (Word, Excell, Power Point).				
Week XIV	Security systems in health care institutions, panic keys.				
Week XV	Panic buttons.				
Methods of teaching: Lectures, practical classes, work with real software applications, and exercises.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature::

1. Tasić M., Ćirić M.: Osnovi informatike, udžbenik, Prirodno-matematički fakultet, Niš, 2018

Recommended Literature:

2. Milošević Z., Bogdanović D.: Statistika i informatika u oblasti medicinskih istraživanja, udžbenik, Medicinski fakultet, Niš, 2012
3. Bunzel T.: Microsoft Office 2010 Kao od šale, CET, Beograd, 2010
4. Softver HELIANT za rad u zdravstvenoj ustanovi, demo verzija.
5. Biheller B. R., Evans J., Pinard T. K., Romjer M. R.: Microsoft Office 2007: Introductory Course, Course Technology, Boston, 2007
6. Menvielle L., Audrain-Pontevia A. F., Menvielle W.: The Digitization of Healthcare, Palgrave Macmillan, London, 2007
7. Patersen A.: Digital Health and Technological Promise, a Sociological Inquiry, Routledge, London, 2018

Course outcome (aligned with the study program outcomes):

Upon passing the exam students will be able to apply the acquired knowledge on computer hardware, peripheral units, software tools, multimedia and the internet in real-life situations in health care institutions, or to use the acquired knowledge to improve the current work in health care institutions. In addition to that, application of calculation or text processing program is important for everyday work of health care professionals.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	30	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Živko Avramov, PhD, Professional Studies Professor Srđan Stojanović, PhD, Professional Studies Professor
Teaching Associate:	Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

BASICS OF INTERNAL MEDICINE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Internal Medicine					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-09	mandatory	second	5	lectures	45
				exercises	15
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Basics of Nursing					
Course objective: Acquisition of current theoretical and practical professional knowledge in internal medicine and training for the application of acquired knowledge in the professional work of a healthcare professional.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Cardiology. Specific aspects of care in the department of cardiac rhythm disorders, pacemaker implantation, and electrophysiology.				
Week II	Diagnostics, therapy and prevention of artery hypertension. Specific features of cardiology wards.				
Week III	Prevention, diagnostics and treatment coronary disease risk factors. Diagnostics and treatment of acute coronary syndrome.				
Week IV	Most frequent and most important pulmonary diseases, diagnostics, prevention and treatment. Specific features of pulmonary wards.				
Week V	Most frequent and most important internal oncology diseases, diagnostics, prevention and treatment.				
Week VI	Specific features of the application of cytostatic and chemotherapy treatments in internal medicine patients.				
Week VII	Most frequent and most important hematologic diseases, diagnostics, prevention and treatment. Most frequent and most important hematologic diseases, diagnostics, prevention and treatment.				
Week VIII	Specific features of hematology wards.				
Week IX	Specific aspects of managing patients with hemorrhagic syndrome. Specific aspects of caring for immunocompromised patients.				
Week X	Most frequent and most important gastrointestinal and biliopancreatic diseases, diagnostics, prevention and treatment. Most frequent and most important liver diseases.				
Week XI	Specific aspects of care in gastroenterology departments. Preparation of patients for endoscopic diagnostic procedures.				
Week XII	Endocrinology. Most frequent and most important endocrinology diseases, diagnostics, prevention and treatment. Specific aspects of care in endocrinology departments. Insulin therapy regimens and diabetic foot.				
Week XIII	Most frequent and most important nephrology diseases, diagnostics, prevention and treatment.				

Week XIV	Most frequent and most important immunology diseases, diagnostics, prevention and treatment. Specific features of nephrology and immunology wards.
Week XV	Specific features of dialysis wards. Conducting peritoneal dialysis.

Methods of teaching:
Lectures using various video materials, model-based practice, and exercises.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature::

1. Kopitović I.: Interna medicina za studente zdravstvene njege, udžbenik, Medicinski fakultet, Novi Sad, 2015
2. Antić S., Ilić S., Interna medicina, udžbenik, Medicinski fakultet, Niš, 2009

Recommended Literature:

3. Manojlović D. i dr.: Interna medicina I, udžbenik, Zavod za udžbenike i nastavna sredstva, Beograd, 2013
4. Manojlović D. i dr.: Interna medicina II, udžbenik, Zavod za udžbenike i nastavna sredstva, Beograd, 2013
5. Đurica S.: Interna medicina, udžbenik, Viša medicinska škola, Beograd, 2010
6. Kasper D., Fauci A., Hauser S., Longo D.: Harrison's Principles of Internal Medicine, McGraw-Hill Professional, New York, 2015
7. Humes H. D., DuPont H. L., Gardner L. B., Griffin J. W., Harris Jr. E. D., Hazzard W. R., King Jr. T. E.: Kelley's Textbook of Internal Medicine, LWW, Liverool, 2010
8. Herdman J., Kamitsuru L.: Nursing Diagnoses, Thieme, New York, 2020

Course outcome (aligned with the study program outcomes):
Upon the completion of the course students are trained to recognize in individual and team work cardiovascular, pulmonary, nephrology, endocrinology, gastroenterology, hematology and oncology conditions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor
Teaching Associate:	Zlatko Ćirić, Teaching Associate, Master of Healthcare Organization Vukica Đukić, Teaching Associate, MSc in Nursing and Therapy

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BASICS OF NEUROLOGY AND PHYSIOTHERAPY IN NEUROLOGY

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Basics of Neurology and Physiotherapy in Neurology

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-18	mandatory	third	7	lectures	45
				exercises	45
				other forms of active classes	0
				professional practice	150

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
Anatomy and Physiology

Course objective:
At the end of the instructional process, the student acquires knowledge of the symptoms and signs of diseases affecting specific structures of the nervous system, appropriate evaluation of patients with neurological symptomatology, when to suspect a particular neurological condition, when to carry out appropriate diagnostic procedures, and when to initiate treatment if necessary. The aim of the course also includes acquiring knowledge in recognizing neurological symptoms and mastering skills in working with patients with diseases and injuries of the central and/or peripheral nervous system using physiotherapy methods.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Episodic disorders of consciousness, coma, delirium. Sleep disorders.
Week II	Epilepsies and epileptic syndromes. Headaches, neuralgias, vertigo.
Week III	Cerebrovascular diseases (ischemic). Cerebrovascular diseases (hemorrhagic) and cerebral edema.
Week IV	Cerebrovascular diseases (hemorrhagic) and cerebral edema. Dementias. Neurological aspects of nervous system trauma.
Week V	Tumors of the CNS. Demyelinating diseases of the CNS. Movement disorders and diseases of the cerebellum. Neurology of developmental age.
Week VI	Motor neuron diseases and polyneuropathies. Diseases of the spinal cord. Diseases of the neuromuscular junction and muscles.
Week VII	Clinical presentation, etiology, pathoanatomy, pathophysiology, course, prognosis, and treatment of neurological conditions, with the aim of identifying the most effective kinesiotherapy methods in combination with physical agents to optimize the patient's condition.
Week VIII	Physiotherapy in the rehabilitation of neurological patients. Principles, goals, and tasks of physiotherapy in the rehabilitation process of individuals with diseases and injuries of the peripheral motor neuron, central motor neuron, and extrapyramidal system.
Week IX	Possibilities of primary, secondary, and tertiary prevention of disability. Team work. Contraindications.
Week X	Functional assessment through a holistic approach. Individualization in approach.
Week XI	Plan and program. Selection of activities. Selection of assistive devices, modifications and fabrication, education.

Week XII	Assessment of the living, working, and public environment. Advice on adaptations and modifications.
Week XIII	Education of persons with disabilities, family members, and the community. Working ability evaluation.
Week XIV	Collaboration with team members. Terminology.
Week XV	Management of therapeutic documentation.

Methods of teaching:
Lectures, exercises, model-based work, demonstrations, video presentations, clinical practice.

Student workload:

weekly: 6	per semester: 90

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Kostić V.: Neurologija za studente medicine, udžbenik, Medicinski fakultet, Beograd, 2007
2. Radojčić B.: Neurološki pregled i osnovi kliničke neurologije, Elit Medica, Beograd, 2006

Recommended Literature:
3. Radojičić B.: Bolesti nervnog sistema, udžbenik, Elit-Medica, Beograd, 2000
4. Senić N., Kaluđerović D., Radosavljević S.: Kineziterapija u rehabilitaciji bolesnika sa lezijama kičmene moždine, udžbenik, Viša medicinska škola u Beogradu, Beograd, 2001
5. Jovanović L.: Kineziterapija kod povreda i oboljenja perifernog nervnog sistema, udžbenik, Visoka zdravstvena škola primjenjenih studija, Beograd, 2002
6. Jovanović-Sretenović T.: Praktikum-radna terapija u neurologiji, Visoka zdravstvena škola primjenjenih studija, Beograd, 2012
7. Adams R. D., Victor M., Ropper A. H.: Principles of Neurology, McGraw-Hill, New York, 2005
8. Kearney P., McGowan T., Anderson J., Strosahl D.: The Role of the Occupational Therapist on the Neuro-Rehabilitation Team, Springer Publishing Company, New York, 2007

Course outcome (aligned with the study program outcomes):
After completing the course and passing the exam, the student is able to recognize neurological symptoms in injuries and diseases of the nervous system, perform a functional assessment, identify patient needs, define rehabilitation goals and tasks, manage the rehabilitation process, monitor and evaluate outcomes, and maintain appropriate medical documentation for patients with neurological diseases, disorders, and impairments at all stages of the rehabilitation process.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Jadranka Jovanović Privrodski, PhD, Professional Studies Professor, Specialist in Pediatrics, Subspecialist in Developmental Neurology and Psychiatry, and Subspecialist in Clinical Genetics Ljubica Nikčević Krivokapić, PhD, Professional Studies Professor, Specialist in Physical Medicine and Rehabilitation Milana Mitrić Ašković, PhD, Professional Studies Professor, Specialist in Radiation Oncology
Teaching Associate:	Jadranka Jovanović Privrodski, PhD, Professional Studies Professor, Specialist in Pediatrics, Subspecialist in Developmental Neurology and Psychiatry, and Subspecialist in Clinical Genetics

Specific features that need to be emphasized for the course: no
Note (if applicable): no

BASICS OF NURSING

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Nursing					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-02	mandatory	first	8	lectures	30
				exercises	15
				other forms of active classes	0
				professional practice	150
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Adoption of basic notions in nursing and basic theoretical and practical (resourcefulness) specialist knowledge in nursing, and training in application of the acquired knowledge in professional and research work. Self-education aimed at own protection, protection of patients and other team members, development of critical thinking, independence in nursing and team work abilities.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Theoretical consideration of basic and general notions in medicine.				
Week II	Theoretical consideration of basic and general notions in nursing.				
Week III	Development of nursing.				
Week IV	Nursing and society.				
Week V	Requirements for quality nursing in hospital and out-of-hospital circumstances.				
Week VI	Nurse interventions at patient hospitalization.				
Week VII	Nursing process.				
Week VIII	Data gathering and assessment of needs of patients for nursing.				
Week IX	General (universal) problems in nursing.				
Week X	Nursing of specific groups.				
Week XI	Nursing documentation.				
Week XII	Models (methods) of organization of provision of nursing.				
Week XIII	Progressive nursing and patient categorization.				
Week XIV	Improvement of nursing through research work of nurses.				
Week XV	Progressive nursing and patient categorization.				
Methods of teaching: Lectures using various video materials, dummy exercises, simulation, exercises, problem-based case study analysis, discussion, workshop.					
Student workload:					
weekly: 3			per semester: 45		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature::

1. Rajak S., Imbronjev V.: Osnovi zdravstvene nege, udžbenik, Omega MS Pharmacy, Novi Sad, 2016

Recommended Literature:

2. Tijanić M., Đuranović D., Rudić R., Milović Lj.: Zdravstvena nega i savremeno sestrinstvo, udžbenik, Naučna KMD, Beograd, 2012
3. Babić L.: Zdravstvena nega u radiologiji, udžbenik, Licej, Beograd, 2011
4. Standardizovane aktivnosti zdravstvene nege i zbrinjavanja pacijenta, Vodič za medicinske sestre i tehničare, 2012
5. Maksimović J.: Uvod u medicinu sa teorijom medicine, udžbenik, Medicinski fakultet, No vi Sad, 2011
6. Rudić R., Kocev N., Munćan V.: Proces zdravstvne nege, Praktikum za studente - vodič za praksu, Knjiga-komjerc, Beograd, 2015
7. Stojković B.: Zdravstvena nega u radiologiji, udžbenik, Naučna knjiga, Beograd, 2006
8. Taylor C., Lynn P., Bartlett J.: Fundamentals of Nursing, Wolters Kluwer Health, London, 2018
9. Gulanick M., Myers J. L.: Nursing Diagnoses, Interventions and Outcomes, Elsevier Health Sciences, London, 2011
10. Jacob A.: A Comprehensive Textbook of Midwifery and Gynecological Nursing, Jaypee Brothers Medical Pub, New York, 2015
11. Burke K. M., Bauldoff G., LeMone P.: Medical-Surgical Nursing, Critical Thinking in Patient Care, Pearson Education, New York, 2011
12. Morton P. G., Fontaine D. K.: Critical Care Nursing: A Holistic Approach, Wolters Kluwer, Doublin, 2008

Course outcome (aligned with the study program outcomes):

Adoption of a holistic approach in nursing. Skills. Development of professional awareness, responsibility, humanity, sense of deontology, aesthetics and communication with patients and professional team. Developing students' independence in working according to the healthcare process, mastering independent basic principles of nursing interventions, as well as interdependent nursing interventions in the fields of diagnostics, therapy, physiotherapy, and rehabilitation.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics Slavica Konević, PhD, Professional Studies Professor
Teaching Associate:	Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

BASICS OF PEDIATRICS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Pediatrics					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-10	mandatory	second	5	lectures	30
				exercises	15
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Basics of Nursing					
Course objective: Familiarizing students with medically healthy and sick children, pediatric treatment process and the role of health care professional dealing with nursing in pediatrics. Study analysis and planning needs in pediatric nursing of patients for individuals and groups. Understanding the importance of involving parents in the care and physiotherapeutic procedures for children. Improvement of possibilities of successful communication of treated children, parents and medical team.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Basics of Pediatrics Application of care processes and physiotherapeutic procedures to individual daily basic activities – the conceptual model of V. Henderson.				
Week II	Involvement of parents in healthcare and physiotherapeutic procedures for children and adolescents. Care and physiotherapeutic procedures for healthy children of all ages, prematurely born children, and ill or injured children.				
Week III	Physiotherapeutic procedures for children with special needs. Physiotherapeutic procedures for children experiencing pain.				
Week IV	Nutrition of the newborn. Neonatology. Genetics. Growth and development of children. Child nutrition. Nephrology and endocrinology.				
Week V	Cardiology. Pulmonology and dermatology. Emergency medicine. Psychiatry and neurology. Social pediatrics.				
Week VI	Poisoning and injuries. Discrepancy between physical and psychological maturity. Adolescent medicine. Physiotherapeutic procedures in prenatal diagnostics.				
Week VII	Specific features of children with congenital metabolic disorders.				
Week VIII	Specifičnosti u neonatologiji. Interventions in monitoring growth and development.				
Week IX	Basic principles of nutrition for healthy and ill children. Specific features of children with eating disorders.				
Week X	Specific features of children with endocrine diseases. Specific features in pediatric gastroenterology.				
Week XI	Specific features of pediatric pulmonology departments. Specific features of pediatric cardiology wards.				
Week XII	Specific features of pediatric immunology departments. Specific aspects of pediatric hematology departments.				

Week XIII	Specific features of care in neuropediatric departments. Specific features of pediatric nephrology departments.
Week XIV	Specific characteristics of adolescents. Specific considerations in cases of childhood poisoning.
Week XV	Interventions during pediatric resuscitation and in the most common emergency conditions in pediatrics.

Methods of teaching:
Lectures using various video materials, model-based practice, and exercises.

Student workload:

weekly: 3	per semester: 45

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Mardešić D.: Pedijatrija, udžbenik, Školska knjiga, Zagreb, 2016
2. Jovanović Privrodski J. (ur): Pedijatrija, udžbenik, Medicinski fakultet, Novi Sad, 2012
3. Marinković Lj.: Zdravstvena njega u pedijatriji, udžbenik, G. A. D., Beograd, 2007

Recommended Literature:
4. Felc Z.: Osnove neonatologije, udžbenik, Fakulteta za zdravstvene vede, Maribor, 2008
5. Kliegman R. M., Stanton B., Geme J. S., Schor N. F., Behrman R. E.: Nelson Textbook of Pediatrics, Saunders, Los Angeles, 2011
6. El -Naggar M.: Basic Clinical Pediatrics, University Book Center, Cairo, 2013
7. Ball J. W.: Pediatric Nursing, Pearson education, Prentice Hall, New Jersey, 2008
8. Hockenberry M. J., Wilson D.: Wong's Nursing Care of Infants and Children, Elsevier Health Sciences, London, 2018
9. Maaks D. L. G., Starr N. B., Brady M. A., Gaylord N. M., Driessnack M., Duderstadt K.: Burns' Pediatric Primary Care, Elsevier Health Sciences, London, 2019

Course outcome (aligned with the study program outcomes):
After completing the course, students will improve therapeutic communication with pediatric patients and their families and will develop knowledge and understanding of physiotherapeutic interventions in pediatrics. Students will also be trained to recognize emergency situations and potential life-threatening complications in children.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics
Teaching Associate:	Mira Stjepanović, Teaching Associate, Master Professional Nurse Tijana Rakonjac, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BASICS OF RHEUMATOLOGY AND PHYSIOTHERAPY IN RHEUMATOLOGY

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Basics of Rheumatology and Physiotherapy in Rheumatology

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-21	mandatory	third	7	lectures	45
				exercises	30
				other forms of active classes	0
				professional practice	150

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
Anatomy and Physiology

Course objective:
The aim of the course is to enable the student to apply acquired knowledge and skills to recognize symptoms, types, phases, and stages of disease; assess the patient's condition; plan physiotherapy interventions; manage the rehabilitation process; monitor outcomes; and maintain medical documentation for patients with rheumatic diseases. Acquisition of knowledge on the etiology, pathoanatomical and pathophysiological changes, clinical presentation, course, prognosis, treatment, and rehabilitation of patients with rheumatic diseases from the perspective of kinesiotherapy. The student is able to apply acquired knowledge and skills to recognize symptoms, types, phases, and stages of disease; assess the patient's condition; plan occupational therapy interventions; manage the rehabilitation process; monitor outcomes; and maintain medical documentation for patients with rheumatic diseases, as well as in work with geriatric patients.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Physiotherapy in the rehabilitation process of working-age individuals and older adults with inflammatory and degenerative diseases.
Week II	Physiotherapy in the rehabilitation process of working-age individuals and older adults with extra-articular and metabolic rheumatic diseases.
Week III	Principles and goals of physiotherapy in rheumatology. Goals and tasks.
Week IV	The importance of teamwork.
Week V	The possibilities of occupational therapy in the primary, secondary, and tertiary prevention of disability.
Week VI	Physiotherapeutic assessment.
Week VII	Kinesiotherapy diagnostics, assessment, planning, and program development in the rehabilitation of patients with inflammatory and degenerative rheumatism.
Week VIII	Kinesiotherapy diagnostics, assessment, planning, and program development in the rehabilitation of patients with extra-articular and metabolic rheumatism.
Week IX	Practical application of kinesiotherapy in prevention, education, therapeutic diagnostics and assessment; general and authorized kinesiotherapy methods; manual techniques; and device-based techniques within thermo-, photo-, hydro-, magneto-, sono-, mechano-, and electrotherapy.
Week X	Team-based work in the rehabilitation process of patients with rheumatic diseases.
Week XI	Individualization in approach. Contraindications.
Week XII	Plan and program. Selection of activities.

Week XIII	Assistive devices – assessment, selection, fabrication and modification of ready-made devices, and education.
Week XIV	Education. Assessment of the living, working, and public environment.
Week XV	Terminology. Therapeutic documentation.

Methods of teaching:
Lectures, exercises, case study, video presentations, e-learning, clinical practice.

Student workload:

weekly: 5	per semester: 75

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Pilipović H., Reumatologija, udžbenik, autorsko izdanje, Beograd; 2000
2. Pavlović M., Kineziterapija u reumatologiji, udžbenik, Visoka medicinska škola, Beograd; 2003
3. Jovanović-Sretenović T.: Praktikum-radna terapija u reumatologiji, Viša zdravstvena škola strukovnih studija, Beograd, 2012

Recommended Literature:
4. Nedvidek B.: Osnovi fizikalne medicine i medicinske rehabilitacije, udžbenik, Medicinski fakultet, Novi Sad, 2003
5. Goodacre L., McArthur M.: Rheumatology Practice in Occupational Therapy, Wiley-Blackwell, New Jersey, 2013

Course outcome (aligned with the study program outcomes):
Upon completion of the course and successful passing of the exam, the student will be qualified to assess a patient from the perspective of occupational therapy, define physiotherapy goals in relation to mental function disorders, motivate individuals and/or groups, organize individual and group work as well as sports and recreational activities, select, apply, and dose physiotherapeutic procedures and methods, and evaluate the effects of their work.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor Ljubica Nikčević Krivokapić, PhD, Professional Studies Professor, Specialist in Physical Medicine and Rehabilitation
Teaching Associate:	Brane Gavrančić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BASICS OF SURGERY WITH ORTHOPEDICS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Surgery with Orthopedics					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-17	mandatory	third	5	lectures	30
				exercises	15
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Basics of Nursing					
Course objective: Acquisition of theoretical knowledge and skills in nursing patients in all surgery branches.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Principles of asepsis and antisepsis. Therapy of diseases of the digestive and endocrine systems.				
Week II	Therapy of injuries of the digestive and endocrine systems.				
Week III	Therapy of diseases of the musculoskeletal system. Therapy of injuries of the musculoskeletal system.				
Week IV	Therapy of diseases and injuries of blood and lymphatic vessels.				
Week V	Therapy of diseases and injuries of the central and peripheral nervous systems.				
Week VI	Therapy of diseases and injuries of the skin; principles of reconstructive and aesthetic surgery.				
Week VII	Therapy of diseases and injuries of the genitourinary tract.				
Week VIII	Therapy of diseases and injuries of the chest and lungs.				
Week IX	Therapy of diseases and injuries of the heart; extracorporeal circulation.				
Week X	Etiopathogenesis, classification, and staging of malignant diseases.				
Week XI	Specific features of pediatric surgery, symptomatology and diagnostics of diseases and injuries during childhood.				
Week XII	Definition, types, and methods of organ and tissue transplantation; transplantation from living donors; organization and medicolegal aspects of organ transplantation. Specific aspects of care and physiotherapeutic procedures after organ transplantation.				
Week XIII	Concept of anesthesia and resuscitation, preparation of the patient for surgical treatment, types of anesthesia and monitoring of the surgical patient, and management of the patient in the postoperative period.				
Week XIV	Principles and organization of work in the operating room.				
Week XV	Principles of semi-intensive and intensive care of surgical patients (basics).				
Methods of teaching: Lectures using various video materials, exercises, case analysis, model-based practice, and e-learning.					
Student workload:					
weekly: 3			per semester: 45		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature::
1. Maksimović Ž.: Hirurgija, udžbenik za studente, CIBID, Beograd, 2008
2. Petković S., Bukurov S.: Hirurgija, udžbenik za medicinare i lijekare, Medicinska knjiga, Beograd-Zagreb, 2015

Recommended Literature:
3. Stević D. i sar.: Hirurgija, udžbenik, Savremena administracija, 2011
4. Domazet N.: Hirurgija sa ortopedijom i traumatologijom, udžbenik, Beograd, 2015
5. Terzić N.: Zdravstvena njega u hirurgiji, udžbenik, autorsko izdanje, Lazarevac, 2006
6. Norton J., Barie P. S., Bollinger R. R., Chang A. E., Lowry S., Mulvihill S. J., Pass H. I., Thompson R. W.: Surgery- Basic Science and Clinical Evidence, Springer Publishing Company, New York, 2008
7. Scher L. A., Weinberg G.: General Surgery, LWW, Liverpool, 2011
8. Pudner R.: Nursing the Surgical Patient, Elsevier, London, 2015

Course outcome (aligned with the study program outcomes):
Students will be trained to practically apply the acquired knowledge in all surgical disciplines necessary for acquisition of skill in taking care of all surgical patients in terms of physiotherapy.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics
Teaching Associate:	Zlata Janjić, MD, Teaching Associate, Specialist in Plastic and Reconstructive Surgery Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BIOPHYSICS WITH BIOMECHANICS

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Biophysics with Biomechanics

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-06	mandatory	first	5	lectures	15
				exercises	45
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
no

Course objective:
Acquisition of fundamental theoretic and practical knowledge in biophysics required for subsequent easier understanding of biomechanical system of human organism and application of the knowledge on physiotherapy and medical rehabilitation of various disorders and conditions; familiarization with laws of physics of importance for physiotherapy.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Biotransport. Membrane potential. Biophysics of sensory functions.
Week II	Basics laws of biomechanics and dynamics. Principal rules of biomechanics.
Week III	Elements of human locomotor system, levers.
Week IV	Biomechanical aspects of osteogenesis and mechanical model of bone form adaptation.
Week V	Intermolecular forces.
Week VI	Elasticity at stretching and bending.
Week VII	Energy aspects of bone fracture.
Week VIII	Impulse force.
Week IX	Characteristics of ultra sound, sources of ultra sound.
Week X	X-ray techniques.
Week XI	Electrophysiology, examples of modelling in electrophysiology.
Week XII	Alternate current passage through organism.
Week XIII	Physical basics of diametry.
Week XIV	Diathermy-based methods.
Week XV	Laser, laser in medicine.

Methods of teaching:
lectures using various video materials, exercises, case analysis, discussion, and clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature:

1. Simonović J., Vuković J., Ristanović D., Radovanov R., Popov D.: Biofizika u medicini, udžbenik, Medicinska knjiga, 2013
2. Vasiljev R.: Biomehanika: dinamička morfologija, položaj tijela u prostoru, uslovi ravnoteže, Novi Sad, 2015

Recommended Literature:

3. Grupa autora, Praktikum iz biofizike u medicini, Nauka, 2009

Course outcome (aligned with the study program outcomes):

Familiarization with biophysical basics of mechanics of certain organisms by applying computing methods in biomechanics and understanding laws of biomechanics and their application to complex systems of organisms.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Maja Stojanović, PhD, Professional Studies Professor Živko Avramov, PhD, Professional Studies Professor
Teaching Associate:	Maja Stojanović, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

BUSINESS COMMUNICATION SKILLS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Business Communication Skills					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-01-a	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Through active participation in the learning process, the student should acquire knowledge in the field of communication, with the aim of developing communicative competence and the necessary skills for professional work in the care and treatment of older adults, organizational and team communication, and communication with social partners.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	General notions, aspects, types, parts of communication. Communication competency in professional work. Barriers to communication.				
Week II	Specifics of communication with older adults. The importance of verbal and nonverbal communication with older adults.				
Week III	Specifics of applying health-educational communication methods with older adults. Communication and health-educational counseling — supportive methods.				
Week IV	Establishing first contact and conducting conversations with patients. Specifics of communication with individuals with sensory-perceptual impairments.				
Week V	Ethics in communication. Political and social correctness in communication.				
Week VI	Professional identity and communication. Communication styles.				
Week VII	Emotional communication, empathy. Communication in the function of social support.				
Week VIII	Communication and psychological distress in elderly care and palliative care. Therapeutic and informational communication.				
Week IX	Psychological and social aspects of communication.				
Week X	Communication with people under stress and in crisis. Communication with people with reduced sensory and speech abilities.				
Week XI	Communication with the families of elderly people. Communication in grief.				
Week XII	Interpersonal communication. Teamwork and social partners.				
Week XIII	Public relations of an organization aimed at achieving mutual understanding and realizing common interests.				
Week XIV	Communication in crisis situations.				
Week XV	Conflict management and resolution.				
Methods of teaching: Lectures, exercises, small-group work, methodological exercises, seminar papers, presentations to the group, and student practical activity methods.					

Student workload:	
weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature::

1. Kekuš D.: Komunikacije u profesionalnoj praksi zdravstvenih radnika, coursebook, Beograd, 2010

Recommended Literature:

2. Kekuš D.: Modeli integrisanih komunikacija u zdravstvu, coursebook, Fakultet organizacionih nauka, Beograd u, 2009
3. Guffey M. E., Loewy D.: Business Communication: Process and Product, Cengage Learning, Boston, 2014
4. Hugman B.: Healthcare Communication, Pharmaceutical Press, London, 2009

Course outcome (aligned with the study program outcomes):
At the end of the course, the student should be able to apply the acquired knowledge of communication skills and practically implement the acquired knowledge and skills within physiotherapy and rehabilitation.

Forms of knowledge assessment and grading:

pre-exam requirements	**points**	**exam**	**points**
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Srđan Stojanović, PhD, Professional Studies Professor Darko Tadić, PhD, Professional Studies Professor
Teaching Associate:	Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BUSINESS ENGLISH

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Business English					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-05-e	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Course objective is familiarization with characteristics of the English language, adoption of phrases and patterns necessary for communication at professional level and adoption of techniques of written and oral expressing in professional communication.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Broadening of knowledge on past tenses, dependent and relative clauses				
Week II	Broadening of knowledge on past tenses, dependent and relative clauses				
Week III	Broadening of knowledge on future tenses, dependent and relative clauses				
Week IV	Temporal conjunctions.				
Week V	Temporal clause structure.				
Week VI	Text processing: Business meetings, business correspondence, codes of conduct.				
Week VII	Text processing: Email, written communication.				
Week VIII	Text processing: Basics of financial terminology.				
Week IX	Text processing: Basics of terminology related to receptions, cocktails, ceremonies, and award presentations.				
Week X	Text processing: Project documentation, ROI analysis.				
Week XI	Text processing: Business lunch, gala dinner, cocktail reception.				
Week XII	Text processing: Environmental protection and business life in English-speaking countries.				
Week XIII	Text processing: Hotel, airport, taxi, business trip, conference.				
Week XIV	Text processing: Different nationalities, differences among people.				
Week XV	Text processing: Communication with the media.				
Methods of teaching: Lectures, practical exercises, communication activities, and e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Evans V., Dooley J., Tran T. M.: Career Paths, Medical Book 1, udžbenik, Express Publishing, Berkshire, 2012
2. Dragović R.: Engleski za zdravstvene radnike, udžbenik, Naučna knjiga, Beograd, 2014
3. Momčinović V., Tanay V., Žurić-Havelka S.: Medical English, udžbenik, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2008
4. Murphy R.: English Grammar in Use, Cambridge University Press, Cambridge, 2008
5. McCarthy M., O'Dell F.: English Vocabulary in Use, Cambridge University Press, Cambridge, 2006.

Recommended Literature:

6. Hornby A. S.: Oxford Advanced Learner's Dictionary of Current English, Oxford University Pres, Oxford, 2008
7. MacLean J.: English in Basic Medical Science, Oxford University Press, Oxford, 2010

Course outcome (aligned with the study program outcomes):

Students will be able to apply the acquired knowledge in professional communication, create corresponding written forms in accordance with their professional communication and use speech patterns appropriate to a given situation.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Irena Petrušić, PhD, Professional Studies Professor
Teaching Associate:	Irena Petrušić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

CLINICAL KINESIOLOGY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Clinical Kinesiology					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-11	mandatory	second	5	lectures	15
				exercises	45
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Physiotherapy Assessment and Skills with Physical Factors in Therapy					
Course objective: Introduction to the importance and role of kinesiology in diagnostics and therapy within the process of medical rehabilitation, acquisition, integration, and application of knowledge on movement performance under physiological conditions, and familiarization with theoretical knowledge of the biomechanics of motor functions and the mechanisms of movement execution.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	The role of kinesiology as a discipline and its position in relation to medicine and other scientific fields.				
Week II	The importance of the structure of the human body in morphological, functional, and biomechanical terms.				
Week III	The importance of physics, biophysics, mechanics, and other related sciences closely linked to the study of movement execution and body motion.				
Week IV	The importance of neurophysiology necessary for the study of voluntary movement.				
Week V	The importance of neurophysiology necessary for the study of the formation of motor habits.				
Week VI	Measurement of range of motion and manual muscle testing.				
Week VII	Kinesiology and kinesiotherapy related to: the spine.				
Week VIII	Kinesiology and kinesiotherapy related to: the shoulder complex.				
Week IX	Kinesiology and kinesiotherapy related to: the elbow.				
Week X	Kinesiology and kinesiotherapy related to: the wrist and hand.				
Week XI	Kinesiology and kinesiotherapy related to: the hip.				
Week XII	Kinesiology and kinesiotherapy related to: the knee.				
Week XIII	Kinesiology and kinesiotherapy related to: the ankle.				
Week XIV	Kinesiology and kinesiotherapy related to: the foot.				
Week XV	Kinesiology and kinesiotherapy related to: the facial muscles.				
Methods of teaching: Lectures, use of didactic tools, video presentations, demonstrations, exercises, fieldwork, and clinical practice.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Zec Ž.: Osnovi kineziologije, udžbenik, Visoka medicinska škola, Zemun, 2000
2. Nikolić S., Vučurević S.: Praktikum iz kineziologije, Visoka medicinska škola, Zemun, 2000

Recommended Literature:

3. Frost R.: Applied Kinesiology, Revised Edition: A Training Manual and Reference Book of Basic Principles and Practices, Academic Press, London, 2013
4. Norkin C. C., White J. D.: Measurement of Joint Motion-A Guide to Goniometry, F. A. Davis Company, Philadelphia, 2009

Course outcome (aligned with the study program outcomes):

Independence in assessing and applying movement for therapeutic purposes, and application of acquired knowledge and skills in evaluating the functional capacities of joints. Integrated knowledge of the importance of applying movement in the development of psychophysical abilities and in linking the biological value of the organism, applied in clinical (office-based) settings, forms the basis for the assessment and application of movement in pathological conditions, training in the use of techniques for measuring joint range of motion and manual muscle testing, and mastering the fundamentals of human body kinesiology.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Ivana Kaćanski, PhD, Professional Studies Professor
Teaching Associate:	Ivana Kaćanski, PhD, Professional Studies Professor Kaća Tmočuk, Teaching Associate, Specialist in Physical Medicine and Rehabilitation

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

CLINICAL KINESITHERAPY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Clinical Kinesitherapy					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-13	mandatory	second	8	lectures	15
				exercises	45
				other forms of active classes	0
				professional practice	300
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Clinical Kinesiology					
Course objective: Acquisition of theoretical knowledge on the fundamentals, methods of application, and effects of movement therapy; pedagogical and methodological principles of applying kinesiotherapy relevant to the work of an occupational therapist; acquisition of knowledge on the principles of kinesiotherapy for musculoskeletal dysfunctions; establishing a connection between the pathoanatomical substrate and movement-based treatment; and acquiring knowledge on functional status assessment and the development of programs using specific methods.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Consequences of inactivity; the biological value of movement. Kinesitherapy tools, scientific base, objectives, tasks, form and methods of conducting. Pedagogical and methodological principles of kinesiotherapy, dosing methodology, and starting positions for kinesiotherapy.				
Week II	Types, elements, effects, and use of passive therapeutic movements. Movement development; motor learning as the basis of active kinesiotherapy.				
Week III	Types, elements, effects, and use of active therapeutic movements. Principles of hydro-kinesiotherapy; sports and recreational activities and games as forms of kinesiotherapy.				
Week IV	Indications and contraindications for kinesiotherapy. Specific aspects of kinesiotherapy in elderly persons.				
Week V	Model of musculoskeletal dysfunctions. Function and response of connective tissue to physical forces.				
Week VI	Components significant for musculoskeletal problems: inflammation, immobilization, muscle weakness, muscle tone, pain. Therapeutic tissue assessment and selection of kinesiotherapy techniques: use of movement in differential assessment of soft tissues, tissue loading methods, tissue reactivity.				
Week VII	Impairment of muscle function: strength, speed, endurance, dexterity. Factors influencing muscle function: muscle fiber type and size, force–velocity relationship, length–tension relationship, training specificity.				
Week VIII	Precautions and contraindications in impaired muscle function: pain, Valsalva maneuver, muscle fatigue, physiological adaptation to training. Impairment of mobility. Normal joint mobility, joint range of motion, and functional range of muscle contraction.				

Week IX	Kinesiotherapeutic approach to hypomobility and hypermobility. Pain: etiology and pathophysiology; organic and non-organic pain; dimensions and types of pain. Postural and coordination dysfunctions caused by muscle imbalance and other dysfunctions.
Week X	Gait and gait deviations as a consequence of musculoskeletal dysfunctions. The most significant physiological responses of the cardiovascular and respiratory systems to physical activity and exercise.
Week XI	Adaptation of the respiratory system to exertion under physiological conditions. Functional tests and kinesiotherapy programs depending on respiratory system dysfunction.
Week XII	Aerobic conditioning training. Aerobic treatment programs.
Week XIII	Assessment of exercise tolerance in cardiac dysfunctions.
Week XIV	Functional regulation of peripheral circulation.
Week XV	Tests for assessment of arterial, venous, and lymphatic circulation.

Methods of teaching:
Lectures, exercises, case analyses, exercises on dummy, clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Pavlović M.: Odabrana poglavlja iz opšte kineziterapije, udžbenik, Data status, Beograd, 2009
2. Jevtić M.: Klinička kineziterapija, udžbenik, Medicinski fakultet, Kragujevac, 2001
3. Jovanović L., Ereš S.: Osnovi kineziterapije, autorsko izdanje, Beograd, 2013

Recommended Literature:
4. Pavlović M.: Kineziterapija u procesu rehabilitacije obolelih od kardiovaskularnih bolesti, autorsko izdanje, Beograd, 2002
5. Milojević M.: Kineziterapija mišićnoskeletnih disfunkcija, autorsko izdanje, Beograd, 2009
6. Zec Ž.: Osnovi kineziologije, udžbenik, Visoka medicinska škola, Zemun, 2000
7. Pivetta S., Pivetta M.: Techniques of medical gymnastics Kinesitherapy, Academic Press, London, 2013

Course outcome (aligned with the study program outcomes):
The ability to integrate knowledge acquired through previous courses in order to critically select kinesiotherapy methods with regard to the pathoanatomical substrate being treated and the expected effects; mastery of basic skills in passive and active kinesiotherapy as a foundation for studying methods applied in specific functional deficits related to musculoskeletal and neuromuscular dysfunctions and their application in clinical settings; acquisition of knowledge and mastery of skills in assessment and selection of techniques in the process of addressing typical musculoskeletal dysfunctions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Ivana Kaćanski, PhD, Professional Studies Professor
Teaching Associate:	Ivana Kaćanski, PhD, Professional Studies Professor Kaća Tomčuk, MD, Teaching Associate, Specialist in Physical Medicine and Rehabilitation

Specific features that need to be emphasized for the course: no
Note (if applicable): no

DEGREE PAPER

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Degree Paper					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-24	mandatory	third	10	lectures	0
				exercises	0
				other forms of active classes	300
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: All courses from Years I–III passed					
Course objective: The objective is to train students to apply basic, academic general-education, specialist and specialist-applicative knowledge and methods in solving specific issues within Degree Paper topic. Within the Degree Paper, students, examining the available literature or through work in a health care institution or laboratory, or by statistical data analysis, deal with an issue, its structure and complexity and on the basis of the analyses made draw conclusions on possible ways of its solving. Students are also trained in writing the Degree Paper, presenting it within the set deadline and discuss the Paper with specialists in the relevant area.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
During 300 hours	The Degree Paper represents a professional or research paper in which the student becomes acquainted with research methodology in all areas of importance to healthcare. The Degree Paper topic may be experimental or bibliographic. After completing the research, the student prepares the Degree Paper in a format that includes the following sections: Introduction, Theoretical Background, Methodology, Results and Discussion, Conclusion, Abbreviations (optional), Appendices (optional), References, Candidate's Biography, Key Documentation Information. The thesis defense consists of an oral presentation of the thesis by the student, questions posed by the members of the committee, and the student's responses to those questions.				
Methods of teaching: During the preparation of the Final Thesis, the mentor provides the student with the necessary guidance, directs them to relevant literature, assists in the selection of research methods, supports the analysis and processing of the obtained results, and helps in drawing appropriate conclusions, among other tasks. Within this part of the Final Thesis, the student conducts additional consultations with the mentor and, if necessary, with other instructors who specialize in issues related to the topic of the Final Thesis. If the medical work is conducted in a health care institution, the consent of the medical institution is required.					
Student workload:					
weekly: 20 (formal)			per semester: 300		
Student obligations during the course: Consultations with the mentor, electronic literature search, thesis writing.					
Literature: As agreed with the mentor.					

Course outcome (aligned with the study program outcomes): The student is qualified, based on the knowledge and skills acquired during the course of study, to carry out work in a healthcare institution or laboratory, or to collect relevant professional literature, prepare a written paper, and present it before a competent committee.			
Forms of knowledge assessment and grading:			
pre-exam requirements	**points**	**exam**	**points**
Preparation of the thesis in written form.	20	Responses to questions posed by the three members of the Final Thesis Defense Committee during the thesis defense	30 points (3 × 10 points awarded by the three members)
Degree Paper subject matter	30	-	-
Presentation of the thesis during the Degree Paper defense.	20	-	-
Full name of the lecturers and teaching associates:			
Lecturer:	mentor		
Teaching Associate:	mentor		
Specific features that need to be emphasized for the course: no			
Note (if applicable): no			

ETHICS IN HEALTH CARE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Ethics in Health Care					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-04	mandatory	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Acquisition of basics of applied medicine ethics, understanding practical importance of ethics and recognizing differences between ethical and legal issues, development of critical thinking in the process of ethical analysis, understanding national, European and international legal regulations, knowing rights and responsibilities in health protection, health insurance, as well as knowing rights and responsibilities of providers of medical services, their beneficiaries and of the third party.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Normative ethics in medicine.				
Week II	Ethical principles of importance for health care professionals.				
Week III	Theories of medical ethics.				
Week IV	Ethical norms in medical practice.				
Week V	Ethical case studies in health care practice, moral values, misjudgment.				
Week VI	Mistakes in practice, moral and criminal liability of health care professionals.				
Week VII	Ethical judgement in observance of moral values and rights of patients.				
Week VIII	Nonobservance of codified principles.				
Week IX	Ethics in preclinical and clinical studies (basics).				
Week X	Ethics committee.				
Week XI	European and international regulations.				
Week XII	National health care policy.				
Week XIII	Medical Chamber of Montenegro.				
Week XIV	Medical license.				
Week XV	Court of honor.				
Methods of teaching: lectures, workshops, analysis of practical case studies, problem-based learning, and exercises.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature::

1. Marić J.: Medicinska etika, Data Status, Beograd, 2005

Recommended Literature:

2. Lazarević A.: Socijalna medicina, autorsko izdanje, 2005
3. Grujić V., Martinov Cvejin M., Legetić B.: Socijalna medicina, udžbenik, Medicinski fakultet, Novi Sad, 2011
4. Current laws and by-laws of the Republic of Montenegro in the field of healthcare
5. Hope T.: Medical Ethics, OUP Oxford, Oxford, 2004
6. Fregmen B. F.: Medical Law and Ethics, Prentice Hall, New Jersey, 2011
7. Herring J.: Medical Law and Ethics, Oxford University Press, Oxford, 2020

Course outcome (aligned with the study program outcomes):

After passing the exam, students will be able to critically think on normative and ethical principles, they will know the difference between legal and ethical issues, be able to make critical judgements at provision of health care services if they include moral duties and will be able to understand laws regulating aspects of health care activities, rights and responsibilities of health care professionals, patients and the third party.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics Slavica Konević, PhD, Professional Studies Professor
Teaching Associate:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics Katarina Pešić, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

FIRST AID

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: First Aid					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-12	mandatory	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: The basic objectives of first aid education are to familiarize students with the principles of initial care of suddenly injured or ill persons, to develop skills for the practical application of acquired knowledge, to provide immediate care aimed at preserving the life of the injured person, other people, and the environment, and to improve protection against further injuries and hazards.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Examination and triage of the injured.				
Week II	Evacuation of the injured (taking out, carrying out and transport). Assessment of vital functions and state of consciousness.				
Week III	Airway opening and keeping.				
Week IV	Bolus obstruction – partial, total, procedure algorithm in adults and children.				
Week V	Artificial respiration – expiratory airflow.				
Week VI	Appropriate positions for suddenly injured or ill persons (lateral recovery position, semi-lateral, prone, semi-recumbent, semi-sitting, sitting, knee–elbow position, kneeling position, autotransfusion position).				
Week VII	Sudden cardiac arrest – recognition and basic life support measures in adults and children.				
Week VIII	Use of automated external defibrillators (AEDs). Procedure algorithm – basic resuscitation measures in adults and children.				
Week IX	Bleeding – identification and procedures in external and internal bleeding. Traumatic amputation care procedure.				
Week X	Open injuries (wounds) – care. Bone and joint system injuries (notion, types).				
Week XI	Temporary immobilization. Head and vertebral column injuries.				
Week XII	Thoracic rib and stomach injuries. Care procedures. Complications and prevention of their occurrence.				
Week XIII	Thermal and electrical injuries and their management.				
Week XIV	Cold-related injuries and their management.				
Week XV	Specific injuries, diseases and conditions, care.				
Methods of teaching: Lectures, exercises, case analysis, e-learning, model-based practice, and visits by accredited professionals.					
Student workload:					
weekly: 4			per semester: 30		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Pavlović A.: Prva pomoć, coursebook, Obeležja, Beograd, 2007

Recommended Literature:
2. Pavlović A.: Kardiopulmonalna reanimacija, Obeležja, Beograd, 2007
3. Maroco D.: First Aid Book, CreateSpace Independent Publishing Platform, Roterdam, 2016
4. Piazza G. M.: First Aid Manual, DK, London, 2014
5. Williamson S. N., Goswami M.: First-Aid and Emjergency Care, Kumar Publishing House, Roterdam, 2014
6. Saubers N.: First Aid Book, Everything, London, 2008

Course outcome (aligned with the study program outcomes):
Familiarization of students with the forms of sudden ailments and injuries and methods of prompt and immediate care. Skills in examination and prompt recognition of signs and symptoms in sick or injured persons requiring immediate and urgent care.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor
Teaching Associate:	Brane Gavrančić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

GERIATRICS WITH NURSING IN GERIATRICS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Geriatrics with Nursing in Geriatrics					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-01-e	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Students will acquire knowledge and skills in performing physiotherapeutic procedures and providing care for senior citizens, understand their bodily, social and psychological needs and problems, be familiar with the possibilities of taking care of them in institution or at their home.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	The notion of gerontology and geriatrics. Physical, psychological and social aspect of getting old. Recognition of problems of the old.				
Week II	Theories of getting old, specific features of defining getting old, health issues, old-age illnesses, prevention of complications, treatment, nursing and rehabilitation.				
Week III	Care categorization, therapeutic procedure, specific features of communication.				
Week IV	Most frequent health issues of the old, their prevention and treatment.				
Week V	The role of a physiotherapist and nurse in health protection and nursing of the elderly.				
Week VI	Specific characteristics of physiotherapeutic, rehabilitation, and healthcare procedures in nursing homes and geriatric centers.				
Week VII	Specific features of medical rehabilitation of old persons. Institutions taking care of the old.				
Week VIII	Direction of geriatrics development in the EU. Importance of psychical rehabilitation of the old.				
Week IX	Everyday life activities. Psychophysical activity, elimination of the feeling of being deserted.				
Week X	Team activities, past time activity organization, artistic and sports activities.				
Week XI	Care of local community for improvement of life of senior citizens (associations, day centers).				
Week XII	Gerontology centers, work organization, activities within centers. Work in gerontology centers in Serbia and EU countries.				
Week XIII	Importance of prevention. Palliative care and work with families.				
Week XIV	Education of population in volunteering.				
Week XV	Familiarization with social protection of old persons.				
Methods of teaching: lectures using various video materials, exercises, workshops, clinical practice, visits of teaching base employees.					

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature::
1. Vukadinov J.: Gerijatrija i njega starih osoba, udžbenik, Medicinski fakultet, Novi Sad, 2006
2. Šarenac D.: Zdravstvena njega starih, udžbenik, Licej, Beograd, 2009

Recommended Literature:
3. Dujaković Z. i sar.: Gerijatrija - medicina starije dobi, udžbenik, Medicinska naklada, Zagreb, 2008
4. Stavljenić – Rukavina A., Mitermayer R. R., Roksandić T. S., Mustajbegović J.: Kvaliteta dugotrajne skrbi starijih osoba, Centar za gerontolgiju, Referentni centar Ministarstva zdravlja RH za zaštitu zdravlja starijih osoba, priručnik, Zagreb, 2012
5. Popović -Pejičić S.: Hipotalamus-hipofiza-štitnjača i starenje, Medicinski fakultet, Banja Luka, 2005
6. Boltz. M.: Evidence-Based Geriatric Nursing Protocols for Best Practice, Springer Publishing Company, New York, 2012
7. Nair B. K.: Geriatric Medicine, Springer Singapore, Singapore, 2018
8. Chernoff R.: Geriatric Nutrition: The Health Professional's Handbook , Jones & Bartlett Learning, London, 2006
9. Taylor R.: Oxford Handbook of Palliative Care, Oxford University Press, Oxford, 2009
10. Kasper D., Fauci A., Hauser S., Longo D.: Harrison's Principles of Internal Medicine, McGraw-Hill Professional, New York, 2015

Course outcome (aligned with the study program outcomes):
Upon the course completion student should be able to recognize specific problems of the old, evaluate their functional abilities and possibilities of self-care, train them in self-care and treatment in senior citizens institutions and geriatric hospitals.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Olivera Đurović, PhD, Professional Studies Professor Milica Živaljević, PhD, Professional Studies Professor, Specialist in Oncology
Teaching Associate:	Damir Adrović, Teaching Associate, MD Danijela Simić, Teaching Associate, Specialist Professional Nurse Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

HEALTH CARE EDUCATION METHODOLOGY AND HEALTH PROMOTION

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Health Care Education Methodology and Health Promotion

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-izb-02-a	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
no

Course objective:
The purpose of health promotion in pre-schools and schools is the adequate development of children and the youth, so that they can grow into healthy, satisfied, successful, self-aware and responsible individuals. In addition to that, the objective of the course is to equip students to understand the role of both the health and non-health sectors and the ways in which they are actively integrated in the process of health promotion.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	The definition and concept of health care promotion, principles and strategies.
Week II	The promotion of health and health education in strategic documentation.
Week III	Environments for health promotion implementation.
Week IV	Populational and high-risk strategy for prevention of chronic non-communicable diseases (cardiovascular diseases, diabetes, breast cancer, etc.).
Week V	Behavioral and biological risk factors for the onset of chronic non-communicable diseases.
Week VI	The importance of health promotion in the prevention of infectious diseases (sexually transmitted diseases, lice, viral diseases, measles, COVID-19, etc.).
Week VII	Models of behavior which explain changes that lead to health.
Week VIII	Health education - definitions, goals, methods, and resources.
Week IX	Structure of preventive-promotional programs in preschool and school institutions.
Week X	Maternity schools.
Week XI	Preschool and school programs.
Week XII	Training marginalized groups of people (homeless, Roma, safe houses, etc.).
Week XIII	Content and organization of work in Health Promotion Centers of public health institutes.
Week XIV	Evaluation of the health promotion program.
Week XV	Continuous medical education for health care professionals.

Methods of teaching:
teaching activities, lectures using didactic materials, exercises, workshops, field teaching, and seminar paper.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature::

1. Hojer S.: Pristupi i metode u zdravstvenom odgoju, udžbenik, Koledž zdravlja, Ljubljana, 2005

Recommended Literature:

2. Graser S., Hill E., Potter B., Matijević S., Jović S.: Promocija zdravlja zasnovana na dokazima, Ministarstvo zdravlja Republike Crne Gore, 2006
3. Gerlič I.: Savremene informacione tehnologije u obrazovanju, Nacionalna izdavačka kuća Slovenija, Ljubljana, 2010
4. Pokorn D.: Ishrana u različitim fazama života: dodatak ishrani u ishrani, Marbona, Ljubljana, 2013
5. Koelen M. A., Van den Ban A. W.: Health Education and Helath Promotion, Wageningen Academic Publishers, London, 2014
6. Scriven A.: Promoting Health: A Practical Guide, Bailliere Tindall, Edinburg, 2010
7. Park K.: Parks Text Book Of Preventive & Social Medicine, Banarsidas Bhanot Publishers, Manchester, 2017

Course outcome (aligned with the study program outcomes):

Upon completion of the course and passing the exam, the student will possess skills necessary for work with health care professionals and other community members, groups and individuals in carrying out on health promotion.Above all they will understand the importance of health care education and health promotion, especially for the successful development of preschool children, schoolchildren, and the youth.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	30	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics Slavica Konević, PhD, Professional Studies Professor
Teaching Associate:	Vukica Đukić, Teaching Associate, MSc in Nursing and Therapy Katarina Pešić, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

HUMAN RESOURCES MANAGEMENT IN HEALTH CARE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Human Resources Management in Health Care					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-03-a	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Familiarization of students with the concept of human resources management. The intention of the course is to present to students principal issues in human resources management and segments of manager activities, with human resources management as one of most important. The final goal of the course predominantly determines the selection of contents (topics) and method or classes realization.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Introduction to human resource management. Main activities of personnel management and human resources management.				
Week II	Differences between human resources management and personnel function. Social protection in industry.				
Week III	Recruitment and selection. Adoption of other personnel activities. Legislation. Flexibility and diversity. Information technology. Professional associations of personnel members.				
Week IV	Human resources management. Main characteristics of human resources management. Issues of human resources management concept. Human resources management marketing. Human resources strategy and planning.				
Week V	Strategy devising process. Human resources planning. Anticipation of human resources demand. Job analysis. Evaluation of internal and external human resources supply.				
Week VI	Unemployment. Underqualification. Competition. Geographical factor. Assets. Development. Rewarding. Relations with employees.				
Week VII	the European Union. Recruitment procedures. Job description and person specification, competence profile. Person specification, competence profile in the recruitment context.				
Week VIII	Vacancy advertising. Targeted recruitment. Administrative procedures. Selection, shortlisting, and interviews. Telephone interview. Interview. Interview techniques.				
Week IX	Administrative procedures. Supplementary selection techniques. Psychological testing. References. Medical examinations.				
Week X	Relations in employment. Rights and responsibilities of both parties. Law on Employment. Retirement. Payment for work done or performance evaluation. Role of employer.				

Week XI	Impact of personal problems on the job. Confidentiality.
Week XII	Counseling skill. Communication process. Hierarchical communication levels. Protection at work.
Week XIII	Working time regulation in the EU. Risk assessment. Partnership and involvement of employees.
Week XIV	Employee involvement techniques. Basic characteristics of disciplinary procedure**.** Absence control. The role of human resources manager.
Week XV	Dismissal and redundancy. Fixed-term service agreement. Illegal dismissal. Rights of dismissed employees. Work abroad.

Methods of teaching:
Lectures, practical exercises, workshops, discussion, simulations, analysis of practical case studies, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Mićović P.: Zdravstveni menadžment, udžbenik, ECPD, Beograd, 2008

Recommended Literature:
2. Žujić D.: Menadžment ljudskih resursa i kvalitet, Centar za primijenjenu psihologiju društva psihologa Crne Gore, Beograd, 2013
3. Frančesko M.: Kako Unaprediti menadžment u preduzeću, Novi Sad, Prometej, 2013
4. Flynn W. J., Mathis R. L., Jackson J. H.: Healthcare Human Resource Management, Cengage Learning, Boston, 2006
5. Niles N.: Basic Concepts of Health Care Human Resource Management, Jones & Bartlett Learning, London, 2012
6. Dun R. T.: Dunn and Haimann's Healthcare Management, Health Administration Press, New York, 2010

Course outcome (aligned with the study program outcomes):
Students will be able to apply the acquired knowledge in human resources management within their future profession.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Marko Carić, PhD, Professional Studies Professor Branislav Dudić, PhD, Professional Studies Professor
Teaching Associate:	Marko Carić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

HYGIENE WITH THE BASICS OF MICROBIOLOGY AND PARASITOLOGY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Hygiene with the Basics of Microbiology and Parasitology					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-05	mandatory	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	330
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Acquisition of knowledge about the health education process as a measure of health care at all levels of health protection, including mastering the principles, objectives, and methods of applying health education tools, as well as influencing changes in risky behavior among individuals, families, and the community. Development of students' interest in continuous professional and general education, i.e., training health care professionals for risk management in health care institutions. Introduction to cellular organization and the basic characteristics of bacteria, viruses, and parasites.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Hygiene and health. Hygiene requirements in planning and construction of health care institutions.				
Week II	Illumination, ventilation and heating in health care institutions. Air quality in health care institutions.				
Week III	Water and health. Health safety of drinking water. Water supply of health care institutions. Disinfection of drinking water.				
Week IV	Disposal of solid and liquid waste. Disposal of medical waste.				
Week V	Personal hygiene of health care professionals. Hand hygiene and personal protection substances.				
Week VI	Hygiene procedures in maintaining hygiene of sick persons. Hygienic-epidemiologically adequate solutions of sanitary area. Hygienically adequate treatment of hospital laundry. Hygienic requirements for kitchens and food distribution. Application of HACCP system in food and drinking water handling.				
Week VII	International legislation and legislation in Montenegro, in the area of food and general use objects safety.				
Week VIII	Risk management in health care institutions. Determining critical spots in health care institutions. Epidemiological importance of defining critical spots and critical spot control plan in health care institutions. Health education within the system of scientific disciplines.				
Week IX	Health: the contemporary concept. Health education. Factors influencing health. Lifestyle. Health and the environment. Health promotion and improvement.				

Week X	Behavior and behavior change. Disease prevention. Education, counseling, and information dissemination. Planning, implementation, and evaluation of health education interventions in primary, secondary, and tertiary healthcare institutions.
Week XI	Communication, educational, and organizational methods and strategies. The seven principles of education of the WHO.
Week XII	Implementation of health education interventions within the healthcare system.
Week XIII	General bacteriology: classification of microorganisms, anatomy and physiology of the bacterial cell, bacterial metabolism, effects of physical and chemical agents on microorganisms, pathogenicity and virulence factors, antibiotics, antimycotics and chemotherapeutic agents, physiological microflora, rapid diagnostic tests, and molecular methods in microbiology.
Week XIV	General and special virology: general characteristics of viruses, effects of physical and chemical agents on viruses, pathogenesis and control of viral infections, interferons and antiviral drugs, laboratory diagnostics, and DNA and RNA viruses of significance in human pathology.
Week XV	Parasitology.

Methods of teaching:
lectures, practical classes, discussion, problem solving, and clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature::

1. Novaković B., Grujić V.: Higijena i zdravstveno vaspitanje, udžbenik, Medicinski fakultet, Nov i Sad, 2005

Recommended Literature:

2. Kristoforović-Ilić M.: Higijena sa medicinskom ekologijom, udžbenik, Ortomedics, Novi Sad, 2013
3. Kekuš D.: Zdravstveno vaspitanje, udžbenik, Digital art, Beograd, 2009
4. Baračkov N., Bujak J., Ilić D., Jović S., Panić M. i sar.: Vaspitanje za zdravlje kroz životne vještine, Ministarstvo prosvijete i sporta Republike Crne Gore, 2007
5. Graser S., Hill E., Potter B., Matijević S., Jović S.: Promocija zdravlja zasnovana na dokazima, Ministarstvo zdravlja Republike Crne Gore, 2006
6. Andersen B. M.: Prevention and Control of Infections in Hospitals, Springer, Munchen, 2019
7. Egerton C. F. G.: Lectures on Physiology, Hygiene, for Hospital and Home Nursing, Forgotten Books, London, 2018
8. Gerard T. J., Berdell F. R., Case C. L.: Microbiology: An Introduction, Books a la Carte Edition, Benjamin Cummings, New York, 2009

Course outcome (aligned with the study program outcomes):
The student acquires practical knowledge of professional competencies within their field, as well as knowledge related to risk analysis and risk management in healthcare institutions with regard to hygiene and the protection of the health of healthcare workers and healthcare service users at all levels of healthcare. In addition, upon completion of the course and successful passing of the exam, the student will be familiar with cellular organization and the basic characteristics of bacteria, viruses, and parasites.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-

midterms	30	-	-
Full name of the lecturers and teaching associates:			
Lecturer:	Slavica Konević, PhD, Professional Studies Professor Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics		
Teaching Associate:	Ljiljana Stijepović, Teaching Associate, MSc in Nursing Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse		
Specific features that need to be emphasized for the course: no			
Note (if applicable): no			

MANUAL THERAPY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Manual Therapy					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-16	mandatory	second	6	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	300
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Anatomy and Physiology					
Course objective: The aim of the course is the application of appropriate manual techniques in various pathological conditions, particularly in cases of acute and chronic pain of the spine and joints, as well as in sports injuries.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Areas of application of manual therapy and the position of manual therapy within the overall physiotherapeutic treatment. General principles of manual therapy.				
Week II	Classification of joints Positioning of joints and extremities.				
Week III	Anatomical planes and axes. Treatment planes and joint movements.				
Week IV	Assessment of joint mobility. Assessment of surrounding soft tissues. Specific assessment procedures in manual therapy.				
Week V	Fundamental rules of manual therapy treatment. Content of manual therapy. Biomechanical and functional assessment.				
Week VI	Therapeutic procedures aimed at pain relief.				
Week VII	Therapeutic procedures aimed at increasing mobility.				
Week VIII	Therapeutic procedures aimed at limiting movement.				
Week IX	Self-help therapeutic procedures. History of massage.				
Week X	Massage and its relationship to anatomy.				
Week XI	Types of massage: full-body massage (general massage), partial massage, preventive and therapeutic massage, classical massage, relaxation massage, therapeutic massage, lymphatic massage, anti-cellulite massage, sports massage, massage for pregnant women, hydro-massage.				
Week XII	Space and work surfaces for performing massage. Materials used in massage: talc powder, creams, oils, mixtures and solutions, essential oils; guidelines on indications for use.				
Week XIII	Preparation of the therapist–masseur for performing massage: breathing exercises, modified Jacobson's progressive muscle relaxation.				
Week XIV	Massage techniques. Massage fffects: local and general effects on the muscular, circulatory, nervous, and skeletal systems; respiratory organs; digestive system; heart; skin; blood vessels; and lymphatic system.				

Week XV	Indications and contraindications for massage application: classification of indications based on pathology, possibilities of application, and recommendations for non-application in specific cases.

Methods of teaching:
Lectures, exercises, video presentations, field visit, clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Popović Ž.: Knjiga o masaži, udžbenik, New Look Entertainment, New York, 2016
2. Lidjel L.: Nova knjiga o masaži, Panonija, Novi Sad, 2006

Recommended Literature:
3. Lucy L.: The Book of Massage: The Complete Step-by-Step Guide to Eastern and Western Technique, Atria Books, Boston, 2001

Course outcome (aligned with the study program outcomes):
Students will be able to apply appropriate manual techniques for functional rehabilitation in various musculoskeletal conditions. They will master manual techniques and therapeutic procedures for pain relief, increasing mobility, limiting movement, self-help, as well as techniques of manual mobilization of the locomotor system.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Ivana Kaćanski, PhD, Professional Studies Professor
Teaching Associate:	Ivana Kaćanski, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

MARKETING OF HEALTH CARE INSTITUTIONS

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Marketing of Health Care Institutions

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-izb-04-a	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
no

Course objective:
The aim of the course is to enable students to acquire basic knowledge in the field of health care marketing and to familiarize them with contemporary marketing strategies and communication methods in health care. Accordingly, the primary objective of the course is to introduce students to the development and objectives of various areas of strategic marketing, including its dominant theories, which are essential for successful business development. Students will also gain knowledge of marketing campaigns, the design of marketing plans, and the basic methods used in the marketing of healthcare institutions, governmental bodies, as well as public campaigns and initiatives.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Nature and character of marketing. Evolution of marketing and approaches in studying it. Marketing management process.
Week II	Changes of marketing in health care institutions, government or governmental bodies. Presentation and analysis of marketing.
Week III	Marketing information system and market research Market analysis.
Week IV	Market segmentation and selection of targeted markets. Notion of public perception.
Week V	Importance of marketing in health care in strategic marketing.
Week VI	Market research. SWOT analysis, benchmarking and portfolio. BCG matrix.
Week VII	Integrated marketing communications. Promotional health campaigns. Prevention, promotion of public health and marketing.
Week VIII	Value chain and cost efficiency.
Week IX	General principles of marketing (marketing mix, models, methods and marketing techniques).
Week X	Designing promotional campaign plan. Targeting. Following post-marketing campaign.
Week XI	Medical marketing practice code. General marketing and targeted marketing campaigns. Different types of marketing materials in health care, depending on the target audience. Marketing outsourcing, marketing agencies. Outsourcing of marketing, marketing agencies.
Week XII	Printed material, printed media, billboards, electronic media, social networks.
Week XIII	Direct marketing. Fairs, conferences, meetings. Sponsorships. Website. Promotional material.

Week XIV	Presentation. Marketing and PR. Public appearances of employees, health care institution management, governmental bodies.
Week XV	Dress code. Appearance of employees, institution.

Methods of teaching:
Lectures, discussions, analysis of practical case studies, workshops, guest lectures by industry representatives (marketing or PR managers of healthcare institutions or business organizations), exercises, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Kotler P.: Upravljanje marketingom, udžbenik, Mate, Zagreb, 2011

Recommended Literature:
2. Macura P.: Marketing – mikro, mala i srednja preduzeća, udžbenik, Ekonomski fakultet, Banja Luka, 2009
3. Tasić Lj.: Farmaceutski menadžment i marketing, Nauka, Beograd, 2012
4. Berkowitz N. E.: Essentials Of Health Care Marketing, Jones & Bartlett Learning, Boston, 2010
5. Kotler P., Keller K.: Marketing, Management, Person Education, New Jersey, 2012

Course outcome (aligned with the study program outcomes):
Upon the completion of the course, students will be able to understand strategic marketing in health care and be capable to independently conduct research of marketing methods convenient for solution of a specific project task in terms of health care institutions, governmental bodies, or in terms of public campaigns or initiatives. Students will also be competent to evaluate relevant theories of strategic marketing in different empirical contexts and to understand interconnection between marketing strategy, operative-organizational parts of enterprises and market results. Students will understand how to manage marketing campaign, notion of marketing plan designing and primary methods used in marketing.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teachching associates:

Lecturer:	Marko Carić, PhD, Professional Studies Professor
Teaching Associate:	Marko Carić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

MEDICAL AND PHARMACEUTICAL WASTE

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Medical and Pharmaceutical Waste

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-izb-01-c	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
no

Course objective:
Acquiring knowledge in the field of medical and pharmaceutical waste management, risk assessment methods, particularly the risk of infectious waste, and training students to independently or as part of teams to carry out the identification and classification (categorization) of medical and pharmaceutical waste, and to use data on its categorization for the development and implementation of Waste Management Plan.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Medical waste.
Week II	Pharmaceutical, chemical, pathoanatomical and radioactive waste.
Week III	Creation of waste.
Week IV	Waste flows in health care and other institutions.
Week V	Quantity assessment and risks.
Week VI	classification, collection, marking, storage, treatment and disposal of medical and pharmaceutical waste.
Week VII	Disposal of medical and pharmaceutical waste.
Week VIII	Contemporary methods of treatment and disposal of medical and pharmaceutical waste in Montenegro.
Week IX	Contemporary methods of treatment and disposal of medical and pharmaceutical waste in the world, EU regulative.
Week X	Principles of waste management.
Week XI	Place and role of the person in charge of medical waste management in health care.
Week XII	Agencies and institutions responsible for waste disposal.
Week XIII	National legal regulations.
Week XIV	Recommendations and good practice in the countries of the European Union.
Week XV	Drawing up the Waste Management Plan. Plans in Montenegro.

Methods of teaching:
Lectures, case analysis, discussion, workshops, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature:

1. Tošović S. i sar.: Bezbedno upravljanje medicinskim otpadom, Nacionalni vodič dobre prakse, Ministarstvo zdravlja RS, Beograd, 2009
2. Matović V., Đukić M., Antonijević B.: Praktikum iz kliničko-toksikoloških analiza, ur.: Matović V., Paragon, Beograd, 2005

Recommended Literature:

3. Jokanović M.: Toksikologija, udžbenik, ur.: Gavrilović M., udžbenik, Elit Medica, Beograd, 2011
4. Landrum V. J.: Medical Waste Management and Disposal, Elseiver, London, 2011

Course outcome (aligned with the study program outcomes):

Acquired knowledge and skills in the management of medical and pharmaceutical waste, particularly hazardous waste, as well as the competence of professional staff to educate medical personnel, analyze the current situation, and develop and implement waste management plans in healthcare and pharmaceutical institutions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	30	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Gordana Švonja Parezanović, PhD, Professional Studies Professor Srđan Stojanović, PhD, Professional Studies Professor
Teaching Associate:	Gordana Švonja Parezanović, PhD, Professional Studies Professor Katarina Pešić, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

MEDICAL REHABILITATION

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Medical Rehabilitation					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-mod-01-a	mandatory	third	10	lectures	45
				exercises	45
				other forms of active classes	0
				professional practice	300
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Adoption of principles, ideas and philosophy of modern rehabilitation of sick and injured persons by applying all necessary measures and procedures aimed at a maximum possible recovery, return to living and working environment, resocialization and inclusion into family and society through holistic and individualized approach and interdisciplinary collaboration within rehabilitation team.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Impacts of the living and working environment on psychophysical-social integrity of person.				
Week II	Notion, importance and essence of rehabilitation of sick and injured persons. Disability.				
Week III	Idea, philosophy and development of rehabilitation. Modern concept of rehabilitation.				
Week IV	Medicine-rehabilitation relationship.				
Week V	Rehabilitation division. Ethics and deontology.				
Week VI	Principles of rehabilitation. Side effects and indication.				
Week VII	Holistic approach. Individualization in approach. Multidisciplinary approach. Team work.				
Week VIII	Specific features of disability by age – childhood and adolescence, productive age, retirement age.				
Week IX	Physical, psychical and social aspects of disability. Disability and society.				
Week X	Classifications and models. medical, social, inclusive				
Week XI	Physical and social barriers. Discrimination in family and society. Accessibility. Handicap.				
Week XII	Medical rehabilitation Methodology – physical medicine in rehabilitation. Aids.				
Week XIII	Adaptations and modifications of living, working and public environment.				
Week XIV	Education. Working ability evaluation.				
Week XV	Professional rehabilitation.				
Methods of teaching: Lectures using various video materials, exercises, workshops, model-based practice, and clinical practice.					
Student workload:					
weekly: 6			per semester: 90		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Nedvidek B.: Osnovi fizikalne medicine i rehabilitacije, udžbenik, Medicinski fakultet, 2013

Recommended Literature:
2. K. Savić, A. Mikov: Rehabilitacija dece i omladine, Orto medics, Novi Sad, 2007
3. Jovanović Sretenović T.: Praktikum iz Osnovi rehabilitacije, Visoka zdravstvena škola primijenjenih studija, Beograd, 2012
4. Delin A.: U susret osobama sa invaliditetom, Britanski savjet, Beograd, 2008
5. Vučić R., Marković P., Savković N.: Klinička radna terapija - praktikum sa terapeutskim medicinskim podsetnikom, Alternativa, Beograd, 2006
6. Playforth S.: Upoznavanje osoba sa invaliditetom, Britanski savjet, Beograd, 2008
7. DeLisa J. A., Gans B. M., Walsh N. E., Bockenek W. L.: Physical Medicine and Rehabilitation - Principles and Practice, Lippincott Williams & Wilkins, New York, 2004
8. Smith -Gabai H.: Occupational Therapy in Acute Care, AOTA Press, Maryland, 2011
9. Crouch R., Alers V.: Occupational Therapy in Psychiatry and Mental Health, Wiley-Blackwell, New Jersey, 2005

Course outcome (aligned with the study program outcomes):
By applying the adopted principles and philosophy of modern rehabilitation, through holistic considering of psychophysical-social integrity and individualization in the approach to sick or injured persons and by identifying their specific needs, students will be able to determine application of all required measures and procedures for successful accomplishment of the goal in the process of their recovery, resocialization and reintegration through inclusion into family and society by applying a possible primary, secondary and tertiary prevention of disability.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Ljubica Nikčević Krivokapić, PhD, Professional Studies Professor, Specialist in Physical Medicine and Rehabilitation
Teaching Associate:	Ivana Kaćanski, PhD, Professional Studies Professor Vesna Bilafer, Teaching Associate, Master Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

MENTAL HYGIENE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Mental Hygiene					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-05-a	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Students are trained to perceive phenomena of mental health and mental illness from a wider, multidisciplinary and multidimensional aspect, to assume responsible tasks in protection and improvement of mental health in their work within community, as well as to take care of sick persons against use of high technology and preserve human relationships in institutions and patients homes.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Subject and theoretical fundamentals of mental health.				
Week II	Prevention of mental disorders.				
Week III	Mental health of the entire human life cycle. Birth and childhood. Adolescence. Adulthood. Old age.				
Week IV	Modern life problems: Alienation. Living in an urban environment. Living in a rural environment				
Week V	Nutrition issues. Physical activities. Life crises.				
Week VI	Sickness and disablement in family. Stress and burn-out syndrome.				
Week VII	Emergencies. Refugees, armed conflicts. Natural disasters. Posttraumatic conditions.				
Week VIII	Social pathology and maladaptive behavior. Marginalized groups. Extramarital status. LGBT population.				
Week IX	Domestic violence. Violence against women. Violence against old people.				
Week X	Alcoholism. Drug-addiction. Prostitution.				
Week XI	Religious sects. Pathological gambling. Suicidality. New forms of addiction.				
Week XII	Approach to person from mental-hygiene aspect. Health and sickness.				
Week XIII	Dying and death. Dehumanization and humanization of relations.				
Week XIV	Communication in health care profession.				
Week XV	Comprehensive protection of mental health.				
Methods of teaching: Lectures, exercises, workshops, discussion, seminar paper.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature::

1. Simić M., Kovačević K.: Mentalna higijena, udžbenik, autorsko izdanje, Beograd, 2004

Recommended Literature:

2. Kaličanin P. i dr.: Stres, zdravlje, bolest, udžbenik, Obeležja, Beograd, 2011
3. Berger D.: Zdravstvena psihologija, Društvo psihologa Crne Gore, Centar za prim. psihologiju, Beograd, 2012
4. Havelka M. i dr.: Zdravstvena psihologija, Naklada Slap, Jastrebarsko, 2012
5. Nikolić D.: Bolesti zavisnosti, Narodna knjiga-Alfa, Beograd, 2007
6. Stanković Z., Begović D.: Alkoholizam od prve do poslednje čaše, Kreativni centar, Beograd, 2005
7. Glen A.: Mental Hygiene: How To Change Your Mind, CreateSpace Independent Publishing Platform, London, 2018
8. Tria G. E., Gaerlan J. E., Limpingco D. A.: Principles of Mental Hygiene, Pantas Publishing & Printing, Roterdam, 2010

Course outcome (aligned with the study program outcomes):

Adoption of knowledge and mastering skills in evaluation, monitoring, creating and carrying out therapy communication with health protection beneficiaries – persons with mental health issues, members of their families and healthy members of the community.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Jadranka Jovanović Privrodski, PhD, Professional Studies Professor, Specialist in Pediatrics, Subspecialist in Developmental Neurology and Psychiatry, and Subspecialist in Clinical Genetics Slavica Konević, PhD, Professional Studies Professor
Teaching Associate:	Jelena Kovačev, Teaching Associate, Master Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

ORGANIZATION OF HEALTH CARE SYSTEMS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Organization of Health Care Systems					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-02-b	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Course objective is to familiarize students with basics in organization of health care institutions and health care sector, manner of institution management, specific features of decision-making process in health care, motivation and medical team building, characteristics of internal communication in health care institutions, personnel and human resources building up, characteristics of business policy and planning strategy, administrative procedures and change management in health care institutions, mandatory and other forms of health insurance.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Health care system.				
Week II	The role of good communication.				
Week III	Health care system and health care institution management.				
Week IV	The role of manager, difference between commanding and leadership.				
Week V	Employment policy and schedule.				
Week VI	Introduction process, interview and integration of new employees. Training.				
Week VII	Health care institution organization.				
Week VIII	Primary, secondary and tertiary health protection.				
Week IX	Types of health care institutions.				
Week X	Law on Health care Protection.				
Week XI	Principles of health protection.				
Week XII	Protection of population from infectious diseases.				
Week XIII	Chamber of medical practitioners.				
Week XIV	Administration bodies in charge of health care.				
Week XV	Inspection supervision.				
Methods of teaching: Lectures, workshop, case study, discussion, e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature::

1. Vasiljević R.: Metodika i organizacija zdravstvene nege, udžbenik, Viša medicinska škola, Beograd, 2014
2. Milović Lj.: Organizacija zdravstvene nege sa menadžmentom, udžbenik, Naučna knjiga, Beograd, 2014

Recommended Literature:

3. Grujić V., Martinov Cvejin M., Legetić B.: Socijalna medicina, udžbenik, Medicinski fakultet, Novi Sad, 2011
4. Garcarz W., Chambers R., Ellis S.: Make Your Healthcare Organisation a Learning Organisation, CRC Press, Manchester, 2013
5. Amelung W. E.: Healthcare Management, Springer-Verlag Berlin Heidelberg, Munchen, 2012
6. Morrisey Michael A.: Health Insurance, Health Administration Press, 2007
7. Beik Janet I.: Health Insurance Today: A Practical Approach, Saunders, Philadelphia, 2010

Course outcome (aligned with the study program outcomes):

Upon completing the course, student will be able to organize medical teams, ensure solid communication within health care institution, efficiently make decisions and manage changes under time pressure and understand systems of mandatory and other forms of health insurance.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Olivera Đurović, PhD, Professional Studies Professor Šimon Slađana, PhD, Professional Studies Professor
Teaching Associate:	Olivera Đurović, PhD, Professional Studies Professor Zlata Janjić, MD, Teaching Associate, Specialist in Plastic and Reconstructive Surgery

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

PATHOPHYSIOLOGY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Pathophysiology					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-08	mandatory	second	6	lectures	45
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Anatomy and Physiology					
Course objective: The course should provide students with knowledge of the mechanisms of damage to cells, tissues, and organs, familiarize them with the morphological changes underlying diseases, train them to recognize morphological changes in cells, tissues, and organs, and enable them to understand the etiology, pathogenesis, and clinical manifestations of the most significant metabolic disorders and functional disorders of organs and organ systems, as well as the causes and mechanisms of malignant cell transformation and the characteristics of tumor growth and the changes it induces in the organism.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Cellular adaptation.				
Week II	Cell aging and cell death.				
Week III	Common morphological changes of the cell.				
Week IV	Morphological changes of the cell with major consequences.				
Week V	Etiopathogenesis of acute inflammation.				
Week VI	Etiopathogenesis of chronic inflammation.				
Week VII	Malignant transformation of the cell.				
Week VIII	Consequences of malignant cell transformation. Growth.				
Week IX	Disorders of water and electrolyte balance.				
Week X	Disorders of acid–base balance.				
Week XI	Etiopathogenesis of malnutrition, obesity, and diabetes mellitus.				
Week XII	Etiopathogenesis of atherosclerosis, disorders of cardiovascular system function, and disorders of respiratory system function.				
Week XIII	Etiopathogenesis of disorders of kidney function, disorders of endocrine gland function and neuroendocrine regulation.				
Week XIV	Etiopathogenesis of disorders of nervous system function.				
Week XV	Etiopathogenesis of disorders of the digestive system, disorders of blood composition and function, and disorders of skin function.				
Methods of teaching: Lectures, practical classes, problem-oriented tasks, case analysis, discussion, and guest lectures by professionals from a medical biochemistry laboratory.					
Student workload:					
weekly: 5			per semester: 75		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature::

1. Radić S.: Opšta patofiziologija, udžbenik, Medicinski fakultet, Niš, 2012
2. Beleslin B.: Specijalna patološka fiziologija, Beograd 2008
3. Ubavić M.: Patološka fiziologija, interne skripte, Beograd, 2017

Recommended Literature:

4. Gamulin M., Marušić M., Kovač Z.: Patofiziologija, udžbenik, Medicinska naklada, Zagreb, 2015
5. Maličević Ž. i sar.: Osnovi patološke fiziologije, udžbenik, Panevropski univerzitet Apeiron, Banja Luka, 2009
6. Babić Lj., Borota R., Lučić A.: Priručnik praktičnih i seminarskih vježbi iz patološke fiziologije, Medicinski fakultet, Novi Sad, 2007
7. Kovač Z., Gamulin S. i s ar.: Patofiziologija, Zadaci za problemske seminare, Medicinska naklada, Zagreb, 2006
8. Živančević-Simonović S.: Opšta patološka fiziologija, udžbenik, Medicinski fakultet Kragujevac, 2012
9. Đorđević -Denić G. i sar.: Specijalna patološka fiziologija, udžbenik, Zavod za izdavanje udžbenika, Beograd, 2013
10. Banasik J. L.: Pathophysiology, Saunders, Los Angeles, 2018
11. Norris T. L.: Porth's Essentials of Pathophysiology, LWW, Liverpool, 2019
12. Huether S. E., McCance K. L.: Understanding Pathophysiology, Elsevier, London, 2016
13. McCance K. L., Huether S. E.: Pathophysiology for Pathophysiology: The Biologic Basis for Disease in Adults and Children, Mosby, London, 2006
14. Stewart J.: Anatomical Atlas of Pathophysiology, Wolters Kluwer, Glazgow, 2012

Course outcome (aligned with the study program outcomes):

Upon the completion of the course students have a command of basic medical terminology and are able to adequately present medically relevant facts, understand etiology and pathogenesis of principal metabolic and functional disorders of human organs and organ systems. They are able to connect their clinical manifestations with causes and mechanisms of their appearance and have a basic pathobiological knowledge enabling them to understand mechanisms of chemical agents and drug action, as well as a diagnostic strategy in case of pathological occurrences at a level required for competent carrying out of their duties.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	30	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Milan Ubavić, PhD, Professional Studies Professor, Specialist in Pathophysiology
Teaching Associate:	Milan Ubavić, PhD, Professional Studies Professor, Specialist in Pathophysiology

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

PHARMACOLOGY AND DRUG DOSING

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Pharmacology and Drug Dosing					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-04-b	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: To provide the student with: knowledge of the mechanisms of action of medications, information necessary for understanding the various effects of medications, understanding of the therapeutic and adverse effects of specific groups of medications, and knowledge of the principles of therapeutic use of medications.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Introduction. History of pharmacology. Pharmacology division. Pharmacology division. General principles and drug development. Classification of medications.				
Week II	General principles and drug development. Dosing. LADMER (liberation, absorption, distribution, metabolism, elimination and response of organism to administered drug).				
Week III	Effects of drugs on organism. Type and character of drug effects. Drug effect mechanisms.				
Week IV	Drug effect mechanisms. Changes in drug effects with repeated administration. Drug–drug interactions.				
Week V	Adverse effects of medications. Drug dependence.				
Week VI	Fundamentals of clinical pharmacology. Nonsteroidal anti-inflammatory drugs (NSAIDs). Disease-modifying antirheumatic drugs (DMARDs).				
Week VII	Pharmacology of the blood: anticoagulant and coagulant drugs, antiplatelet drugs, local and systemic hemostatic agents.				
Week VIII	Antianemic drugs.				
Week IX	Water and electrolytes: Fluid replacement agents.				
Week X	Drugs for parenteral nutrition. Pharmacology of the respiratory tract. Pharmacology of the cardiovascular system.				
Week XI	Drugs and therapy for peripheral vascular diseases. Antilipemic agents. Pharmacology of the digestive tract. Immunosuppressants and immunostimulants.				
Week XII	Pharmacology of vitamins. Drugs for the treatment of obesity. Pharmacology of hormones.				
Week XIII	Pharmacology of antimicrobial drugs. Antifungal drugs. Antiviral drugs. Amebicidal drugs. Antimalarial drugs. Antiparasitic drugs.				
Week XIV	Antiseptics and disinfectants.				

Week XV	Chemotherapy of malignant diseases.

Methods of teaching:
lectures, exercises, video presentations, demonstrations, workshop, and analysis of practical case studies.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Đaković Švajcer K.: Osnovi farmakologije, udžbenik, Ortomedics, Novi Sad, 2010
2. Varagić V., Milošević M.: Farmakologija, udžbenik, Elit Medica, Beograd, 2005

Recommended Literature:
3. Rang H. P., Dale M. M., Ritter J. M., Moore P. K.: Farmakologija, udžbenik, Data Status, Beograd, 2004
4. Jakovljević V., Sabo A., Tomić Z. (ured.), Stević S. i sar.: Ljekovi u prometu 2009, priručnik o ljekovima i njihovoj primjeni, ATC klasifikacija, Novi Sad, Beograd, Niš, Kosovska Mitrovica, Podgorica, Ortomedics, Novi Sad, 2007, 2009
5. Bukarica-Gojković Lj. i sar.: Praktikum iz farmakologije, Medicinski fakultet, Beograd, 2009

Course outcome (aligned with the study program outcomes):
Upon completion of the course, the student is expected to be able to: identify the mechanisms underlying the different effects of specific groups of medications, relate the therapeutic and adverse effects of these medication groups to their various pharmacological actions, and develop an independent critical approach to medications.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Gordana Švonja Parezanović, PhD, Professional Studies Professor
Teaching Associate:	Gordana Švonja Parezanović, PhD, Professional Studies Professor Jasmina Birta, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

PHYSIOTHERAPY ASSESSMENT AND SKILLS WITH PHYSICAL FACTORS IN THERAPY

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Physiotherapy Assessment and Skills with Physical Factors in Therapy

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-07	mandatory	first	12	lectures	60
				exercises	75
				other forms of active classes	0
				professional practice	420

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
no

Course objective:
Introduction to the possibilities of assessing functional condition and quality of life prior to physiotherapy or medical rehabilitation in conditions or injuries that most often lead to personal and social dysfunction, aimed at assessment making and improvement in effects of treatment.
Acquisition and development of knowledge of methods and techniques within manual therapy and physical forms of energy from natural and artificial sources, including thermotherapy, phototherapy, laser therapy, hydrotherapy, sonotherapy, magnetotherapy, balneoclimatotherapy, and electrotherapy, as well as the acquisition of knowledge and skills in applying methods and techniques within modern electrotherapy technology and electrodiagnostic techniques, and the interpretation of obtained results.
The objective of the course is to familiarize students with factors affecting physiotherapy assessment, i.e. the course of physiotherapy and rehabilitation process.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	The notion of quality of life. General and specific factors of quality of life and organism condition. Criteria for the development and application of functional tests. The importance of an interdisciplinary approach to assessing functional status.
Week II	Assessment of functional status and quality of life in patients with chronic arthritis, seronegative spondyloarthritis, fibromyalgia, after injuries of the locomotor system, and with peripheral nerve lesions.
Week III	Assessment of functional status and quality of life in patients with degenerative diseases of the spine, degenerative diseases of peripheral joints, amputations, quadriplegia and paraplegia, after cerebrovascular insult (stroke), as well as the specific aspects of assessment in pediatrics, geriatrics, and in pregnant women.
Week IV	Definition and scope of physical therapy, its history, classification of physical therapy, device-based and non-device-based physical therapy, thermotherapy, paraffin therapy, peloid therapy, parafango, clay therapy, hot steam, sauna, hydrotherapy, baths, showers, cryotherapy and cryomassage, and inhalation therapy.
Week V	Magnetotherapy, its therapeutic significance in patient treatment; sonotherapy, infrasound and ultrasound, application techniques, ultrasonophoresis; phototherapy—the solar spectrum, infrared and ultraviolet radiation, heliotherapy; laser therapy, types of lasers, biological effects of laser therapy; and electrotherapy.

Week VI	Static electricity, electric voltage, electric current; galvanization, stable and labile galvanization; hydrogalvanic procedures; drug iontophoresis (electrophoresis); faradic and neofaradics currents; diadynamic currents; interferential currents; application techniques; exponential current; electrodiagnostics and electrostimulation; TENS; high-frequency currents; darsonvalization; and shortwave diathermy.
Week VII	Types of factors that influence the course of physical therapy and the way they act. Explanation of the reasons for their effects.
Week VIII	External and internal influences on increasing or decreasing the effect of a given factor.
Week IX	Minimum and maximum values of individual factors that may influence the initiation of physical therapy or rehabilitation.
Week X	Methods for reducing the intensity of factors that hinder the course of physical therapy or rehabilitation.
Week XI	Methods for increasing the intensity of factors that influence the course of physical therapy or rehabilitation.
Week XII	Dependence of factors on age and gender.
Week XIII	Influence of the body's physiological state and dietary habits in the period preceding the need for physical therapy or rehabilitation. Influence of climate / geographical environment.
Week XIV	Duration of factor exposure. Markers indicating the intensity of influence on a given factor.
Week XV	Specific considerations in young children. Specific considerations in geriatrics. Specific aspects of the postoperative course.

Methods of teaching:
Lectures, exercises, case study, discussion, e-learning.

Student workload:

weekly: 9	per semester: 135

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Veljković M.: Opšta fizikalna terapija, udžbenik, Visoka medicinska škola Ćuprija, Ćuprija, 2004
2. Mihailović V.: Fizikalna terapija, udžbenik, Obodsko slovo, Rijeka Crnojevića, 2002
3. Kunej D., Stanković T.: Praktikum fizikalne terapije, Visoka medicinska škola, Zemun, 2004

Recommended Literature:
4. Sulović V., Jakovljević Đ.: Medicina i kvalitet života, Beograd, SANU, 1997
5. Goodman C. C., Snyder T. K.: Differential Diagnosis for Physical Therapists: Screening for Referral, Saunders, 2012

Course outcome (aligned with the study program outcomes):
Understanding the basic concepts of all aspects of quality of life and a multidisciplinary approach to the evaluation and treatment of patients, understanding the importance of applying such an approach for preventive purposes, physiotherapy treatment, or rehabilitation, as well as mastering techniques for assessing quality of life and the factors that influence the feasibility of physiotherapy or medical rehabilitation. Upon completion of the course and successful passing of the exam, the student will have understood and acquired knowledge of the factors that influence physiotherapeutic assessment and the course of the physiotherapy and rehabilitation process, thereby being prepared to study techniques in physiotherapy and rehabilitation.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-

exercises/professional practice	20	-	-
midterms	30	-	-
Full name of the lecturers and teaching associates:			
Lecturer:	Ivana Kaćanski, PhD, Professional Studies Professor		
Teaching Associate:	Kaća Tomčuk, MD, Teaching Associate, Specialist in Physical Medicine and Rehabilitation Zoran Tešić, Teaching Associate, Specialist in Applied Physiotherapy		
Specific features that need to be emphasized for the course: no			
Note (if applicable): no			

PHYSIOTHERAPY IN INTERNAL MEDICINE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Physiotherapy in Internal Medicine					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-14	mandatory	second	5	lectures	15
				exercises	15
				other forms of active classes	0
				professional practice	150
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Physiotherapy Assessment and Skills with Physical Factors in Therapy Basics of Internal Medicine					
Course objective: Students will be trained to practically apply the acquired knowledge in all surgical disciplines necessary for acquisition of skill in taking care of all surgical patients in terms of nursing.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Recapitulation of teaching units in the field of internal medicine.				
Week II	Recapitulation of teaching units in the field of internal medicine.				
Week III	Kinesitherapy diagnostics, assessment, plan and programme of kinesitherapy within treatment in internal medicine.				
Week IV	Kinesitherapy diagnostics, assessment, plan and programme of kinesitherapy within rehabilitation in internal medicine.				
Week V	Kinesiotherapy in myocardial infarction.				
Week VI	Kinesiotherapy in hypertension.				
Week VII	Kinesiotherapy after coronary artery bypass surgery.				
Week VIII	Kinesiotherapy and diseases of peripheral circulation.				
Week IX	Kinesiotherapy and extracardiac arterial bypass surgery.				
Week X	Kinesiotherapy in obstructive pulmonary diseases and asthma.				
Week XI	Kinesiotherapy in obstructive pulmonary diseases and asthma.				
Week XII	Specific aspects of kinesiotherapy in pediatric pulmonary diseases.				
Week XIII	Kinesiotherapy in inflammatory rheumatism.				
Week XIV	Kinesiotherapy in degenerative rheumatism.				
Week XV	Kinesiotherapy in extra-articular rheumatism.				
Methods of teaching: Lectures, exercises, e-learning, use of models, simulations, and clinical practice.					
Student workload:					
weekly: 2			per semester: 30		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Pavlović M.: Kineziterapija u procesu rehabilitacije obolelih od kardiovaskularnih bolesti, udžbenik, Beograd, 2002
2. Popović M.: Kineziterapija respiratornih poremećaja, udžbenik, autorsko izdanje, Beograd, 2003

Recommended Literature:

3. Manojlović D. i dr.: Interna medicina I, udžbenik, Zavod za udžbenike i nastavna sredstva, Beograd, 2003
4. Manojlović D. i dr.: Interna medicina II, udžbenik, Zavod za udžbenike i nastavna sredstva, Beograd, 2003
5. Đurica S.: Interna medicina, udžbenik, Viša medicinska škola, Beograd, 2000
6. Pavlović M.: Kineziterapija u reumatologiji, udžbenik, Beograd, 2003
7. Kasper D., Fauci A., Hauser S., Longo D.: Harrison's Principles of Internal Medicine, McGraw-Hill Professional, New York, 2015

Course outcome (aligned with the study program outcomes):

Students are trained to apply methods of physiotherapy and medical rehabilitation of internal medicine patients (cardiology, pulmonary, gastroenterology, nephrology, endocrinology, immunology, oncology).

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor Ljubica Nikčević Krivokapić, PhD, Professional Studies Professor, Specialist in Physical Medicine and Rehabilitation
Teaching Associate:	Zlatko Ćirić, Teaching Associate, Master of Healthcare Organization Kaća Tomčuk, MD, Teaching Assiciate, Specialist in Physical Medicine and Rehabilitation

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

PHYSIOTHERAPY IN PEDIATRICS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Physiotherapy in Pediatrics					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-15	mandatory	second	5	lectures	15
				exercises	15
				other forms of active classes	0
				professional practice	150
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Physiotherapy Assessment and Skills with Physical Factors in Therapy, Basics of Pediatrics					
Course objective: Acquisition of knowledge on most important diseases and injuries in children and adolescents, on deformities and congenital anomalies, acquisition of knowledge on possibilities of application of rehabilitation methods in sick or injured children and adolescents, acquisition of knowledge on specific features of physiotherapy and medical rehabilitation in pediatrics.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Introductory part, psychomotor development of children, specific characteristics of a sick child.				
Week II	The role of physiotherapist in pediatrics.				
Week III	Relationship: child, parent, physiotherapist. Assessment of the psychophysical condition of an ill child, rehabilitation of children with neurological disorders, and rehabilitation in the treatment of developmental disorders in children.				
Week IV	Rehabilitation of children with cerebral palsy, rehabilitation of children with rheumatic diseases, and rehabilitation of children suffering from respiratory and cardiac diseases.				
Week V	Rehabilitation of children with orthopedic diseases, rehabilitation of children with spinal deformities, rehabilitation of children with limb deformities, and rehabilitation of children after injuries to the locomotor system.				
Week VI	Rehabilitation of children after surgical interventions.				
Week VII	Team collaboration in pediatric physiotherapy, and specialized training of parents in the rehabilitation of ill children.				
Week VIII	Neurobiology of developmental age. Psychomotor development and motor control training.				
Week IX	Physiotherapy in clinical conditions: neurological diseases of the central and peripheral nervous system.				
Week X	Intellectual disability, birth trauma, congenital abnormalities, injuries and diseases of bones, joints, muscles, and skin, as well as respiratory and cardiac diseases in children.				
Week XI	Use and management of medical documentation.				
Week XII	Development of skills for examining a child.				
Week XIII	Development of communication skills with a child.				

Week XIV	Integration of knowledge from basic clinical subjects, the pathoanatomical substrate, and the effects of physiotherapy methods.
Week XV	Integration of knowledge from basic clinical subjects, the pathoanatomical substrate, and the effects of physiotherapy methods – practical examples.

Methods of teaching:
Lectures, exercises, case analysis, dummy work, e-learning, and clinical practice.

Student workload:

weekly: 2	per semester: 30

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Savić K, Mikov A.: Rehabilitacija djece i omladine, udžbenik, Ortomediks, Novi Sad, 2007
2. Savić K.: Rehabilitacija u pedijatriji, udžbenik, autorsko izdanje, Novi Sad, 2003
3. Malčić I., Jelušić M.: Pedijatrijska reumatologija, Medicinska naklada, Zagreb, 2014
4. Jovanović L.: Kineziterapija u pedijatriji, udžbenik, autorsko izdanje, Beograd 2000

Recommended Literature:
5. Veljković M.: Klinička fizikalna terapija, udžbenik, Visoka medicinska škola, Ćuprija, 2004
6. Shepherd R.: Physiotherapy in Paediatrics, Butterworth Heinemann, Boston, 2004
7. Jan S. T.: Pediatric Physical Therapy, LWW, New York, 2014
8. Toby M. Long: Handbook of Pediatric Physical Therapy, Villey, London, 2012

Course outcome (aligned with the study program outcomes):
Competence for independent and team-based work using physiotherapy and medical rehabilitation methods in pediatrics.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics Ivana Kaćanski, PhD, Professional Studies Professor
Teaching Associate:	Tijana Rakonjac, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

PHYSIOTHERAPY IN SURGERY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Physiotherapy in Surgery					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-19	mandatory	third	3	lectures	30
				exercises	45
				other forms of active classes	0
				professional practice	300
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Physiotherapy Assessment and Skills with Physical Factors in Therapy Basics of Surgery with Orthopedics					
Course objective: Acquisition of theoretical knowledge and skills in nursing patients in all surgery branches.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Recapitulation of all teaching units in the area of surgery and orthopaedics.				
Week II	Recapitulation of all teaching units in the area of surgery and orthopaedics.				
Week III	Application of asepsis and antisepsis principles in daily surgical practice.				
Week IV	Possible methods of physiotherapy and medical rehabilitation of patients with injuries of digestive and endocrine system.				
Week V	Possible methods of physiotherapy and medical rehabilitation of patients with locomotor system diseases.				
Week VI	Possible methods of physiotherapy and medical rehabilitation of patients with surgical conditions and injuries of blood and lymphatic vessels.				
Week VII	Possible methods of physiotherapy and medical rehabilitation of patients with surgical conditions and injuries of the central and peripheral nervous system.				
Week VIII	Possible methods of physiotherapy and medical rehabilitation of patients with burns.				
Week IX	Possible methods of physiotherapy and medical rehabilitation of patients with surgical conditions and urogenital tract injuries.				
Week X	Possible methods of physiotherapy and medical rehabilitation of patients with thoracic and lung injuries.				
Week XI	Possible methods of physiotherapy and medical rehabilitation of patients with surgical conditions and cardiac injuries.				
Week XII	Possible methods of physiotherapy and medical rehabilitation of oncology patients.				
Week XIII	Possible methods of physiotherapy and medical rehabilitation of children as oncology patients – specific pediatric features.				
Week XIV	Possible methods of physiotherapy and medical rehabilitation after semi-intensive and intensive care of surgical patients.				
Week XV	Possible methods of physiotherapy and medical rehabilitation after semi-intensive and intensive care of surgical patients.				

Methods of teaching:
Lectures, exercises, model-based work, simulations, video presentations, e-learning, and clinical practice.

Student workload:

weekly: 5	per semester: 75

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Pajić D., Mačvanin Đ. i sar.: Hirurgija, udžbenik, Medicinski fakultet, Novi Sadu, 2009
2. Stanić V., Maličević Ž. i sar.: Grudna hirurgija (ur.: Jaković R. M.), udžbenik, Medicinski fakultet, Beograd, 2004

Recommended Literature:
3. Banović D.: Povrede u sportu, udžbenik, Draslar partner, Beograd, 2006
4. Nikolić Ž.: Povrede ekstremiteta, liječenje i medicinska rehabilitacija, Draslar partner, Beograd, 2009
5. Norton J., Barie P. S., Bollinger R. R., Chang A. E., Lowry S., Mulvihill S. J., Pass H. I., Thompson R. W.: Surgery: Basic Science and Clinical Evidence, Springer Publishing Company, New York, 2008

Course outcome (aligned with the study program outcomes):
Students will be trained to practically apply the acquired knowledge in all surgical disciplines necessary for acquisition of skill in taking care of all surgical patients in terms of nursing.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery Ivana Kaćanski, PhD, Professional Studies Professor, Specialist in Physical Medicine and Rehabilitation
Teaching Associate:	Zlata Janjić, MD, Teaching Associate, Specialist in Plastic and Reconstructive Surgery Zoran Tešić, Teaching Associate, Specialist in Applied Physiotherapy

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

PSYCHOLOGY IN NURSING AND HEALTH CARE

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Psychology in Nursing and Health Care

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-19	mandatory	third	3	lectures	15
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
no

Course objective:
The aim of the course is to enable students to acquire knowledge of the psychology of patients and their family members at the moment of learning about a health problem, during the process of addressing the health issue, as well as in situations involving coping with severe or incurable illnesses, permanent consequences, and similar circumstances. In addition, the aim of the course is to train students to recognize and understand the emotional and psychological states that health care professionals may experience while working with patients. In addition to that, the objective of the course is for the student to acquire knowledge about the impact of psychological factors and the significance of stress in the development of psychosomatic disorders. They will also gain understanding of coping mechanisms for stress and pain management; as well as acquire knowledge that will enable them to recognize burnout syndrome in real-life professional environments, particularly within the health care sector, along with strategies to overcome it.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Health psychology and health promotion.
Week II	Psychology of illness.
Week III	Accepting disease as a reality.
Week IV	Decisiveness in addressing health problems.
Week V	Psychology of a patient at the moment of becoming aware of his/her health issue and during treatment.
Week VI	Psychological states in case of uncertainty, expectations, unexpected treatment, unsuccessful treatment, deterioration in diagnosis.
Week VII	Working with the patient's family: the role of family members, support, and openness in communication.
Week VIII	Working with the patient's family: panic versus rationality.
Week IX	Working with the family in cases of receiving a poor diagnosis and in situations of loss.
Week X	Working with the patient's family when referring to long-term illness and treatment.
Week XI	Working with healthcare professionals in situations involving severe emotional states, patient anxiety, and shock.
Week XII	Burnout syndrome.
Week XIII	Pain management. Understanding the relation between the patient and health care professional.

Week XIV	Familiarization with the principles of health care habits development at different ages. The relationship between social support and health.
Week XV	Review of models and strategies for promoting health related behaviors aimed at reducing health issues.

Methods of teaching:
Lectures, exercises, case study, discussion, e-learning.

Student workload:

weekly: 3	per semester: 45

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature::
1. Havelka M.: Zdravstvena psihologija, coursebook, Jastrebarsko-Naklada Slap, 2008

Recommended Literature:
2. Kekuš D.: Komunikacije u profesionalnoj praksi zdravstvenih radnika, Digital Art, Beograd, 2010
3. Rungapadiachy D. M.: Medosebna komunikacija v zdravstvu, Educy, Ljubljana, 2013
4. Payne S. H., Walker J.: Psihologija u zdravstveni njegi, Educy, Ljubljana, 2012
5. Friedman H. S.: Health psychology. Prentice Hall, 2013.
6. Ayers S., De Visser R.: Psychology for Medicine and Healthcare, SAGE Publications Ltd, London, 2018
7. Leigh H.: The Patient: Biological, Psychological, and Social Dimensions of Medical Practice, Springer, Munchen, 2010
8. Mathews A., Steptoe A.: Essential Psychology for Medical Practice, Churchill Livingstone, London, 2013

Course outcome (aligned with the study program outcomes):
Upon completion of the course and passing the exam, the student will gain knowledge of the psychology of patients and their families in the moment of health issue discovery, during the treatment process, and in uncertain situations. The student will also be trained in certain self-control techniques for managing emotional and psychological reactions they may experience as a health care professional while dealing with patients. Additionally, upon course completion, the student should be able to recognize and understand the health care psychology and theoretical models the course is based on; they should recognize psychological aspects of health and illnesses; to identify different psychological reactions to symptoms, illnesses and the importance of seeking professional help and social support; students will understand the role of stress in the development of psychosomatic illnesses and coping strategies; recognize the role of personal factors in experiencing and managing pain; understand the psychological aspects of severe illnesses and terminal condition; and to comprehend the psychological aspects of hospitalization in patients of different ages.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Jadranka Jovanović Privrodski, PhD, Professional Studies Professor, Specialist in Pediatrics, Subspecialist in Developmental Neurology and Psychiatry, and Subspecialist in Clinical Genetics
Teaching Associate:	Jelena Kovačev, Teaching Associate, Master Professional Nurse

Specific features that need to be emphasized for the course: no
Note (if applicable): no

PUBLIC HEALTH

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Public Health					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-02-c	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: The objective of the course is familiarization of students with measures, levels and organization of health care and their training for applying a social-medical approach in future practice, primarily in the field of nursing.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	The development and definition of social medicine.				
Week II	Health and quality of life.				
Week III	Social care of health.				
Week IV	Communication in health care.				
Week V	Health protection.				
Week VI	Social inequalities in health care and obtaining health protection. Vulnerable categories.				
Week VII	Health care policy. Criteria for evaluation of socio-medical importance of health issues.				
Week VIII	Methods of prevention and control of chronic non-communicative diseases.				
Week IX	Health protection systems around the world.				
Week X	Health protection programming.				
Week XI	The role of health care institutions and health care professionals in the system of health care protection.				
Week XII	Health care technology.				
Week XIII	Quality of health protection.				
Week XIV	Classification systems in health care.				
Week XV	Management in health care.				
Methods of teaching: lectures, exercises, discussions, and problem solving.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature::

1. Jakovljević Đ., Grujić V., Martinov Cvejin M.: Socijalna medicina, udžbenik, Medicinski fakultet, Nov i Sad, 2014

Recommended Literature:

2. Hojer S.: Pristupi i metode u zdravstvenom odgoju, udžbenik, Koledž zdravlja, Ljubljana, 2005.
3. Simić S. i sar.: Socijalna medicina, udžbenik, Medicinski fakultet, Beograd, 2012
4. Murphy F.: Community Engagement, Organization, and Development for Public Health Practice, Springer Publishing Company, New York, 2004.
5. Park K.: Parks Text Book Of Preventive & Social Medicine, Banarsidas Bhanot Publishers, Manchester, 2017.
6. Scriven A.: Promoting Health: A Practical Guide, Bailliere Tindall, Edinburg, 2010
7. Aspalter C.: Health Care Systems in Europe and Asia, Routledge, London, 2015

Course outcome (aligned with the study program outcomes):

Upon completion of the course, the students will be familiar with the principles of public health, health care politics, indicators of the population health status, classification systems in health care, and they will understand the functioning of the health care system, especially in the area of nursing, from the perspective of patients, health care professionals, health care institutions, the government, and society.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Olivera Đurović, PhD, Professional Studies Professor Šimon Slađana, PhD, Professional Studies Professor
Teaching Associate:	Vukica Đukić, Teaching Associate, MSc in Nursing and Therapy Katarina Pešić, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

QUALITY CONTROL

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Quality Control					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-06-a	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: The objective of the course is to understand the concept and essence of quality as a market category, to recognize the specific features of quality within a work organization, with special emphasis on the particularities of service in a specific sector, and to become familiar with the basics of institutional organization, methods of institutional management, specificities of decision-making processes, administrative procedures, and change management within the institution. The objective also includes understanding and accepting the concept of standardization and the importance of standards in the process of defining quality.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Quality management: concept, definition of quality, reasons for implementing quality control processes.				
Week II	Characteristics of quality in specific areas (e.g., specific features of quality control in health care...), forms and levels of quality manifestation.				
Week III	Quality management systems: definition and development of various quality systems.				
Week IV	Service standardization as the basis of quality, areas of standard application, types of standards.				
Week V	Requirements of ISO 9000, ISO 9001, ISO 14000, ISO 22000 standards; implementation of the HACCP system, HALAL standards.				
Week VI	The importance of internal procedures within an organization.				
Week VII	Management chain.				
Week VIII	The role of employees in ensuring quality, the importance and role of human resources, the human resource management process.				
Week IX	The importance and role of management in achieving quality.				
Week X	Managers as quality factors.				
Week XI	The role of service users in creating service quality.				
Week XII	Perception, deviations, satisfaction, methods for measuring service quality.				
Week XIII	Strategic approach to quality, trends in business orientation of companies, changes in the structure of offerings.				
Week XIV	Strategic adaptation of services to modern trends.				
Week XV	Market segmentation, differentiation, positioning, application of modern technologies.				

Methods of teaching:
Lectures, case analysis, discussion, workshops, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature::
1. Legetić B.: Principi menadžmenta, udžbenik, Ekonomski fakultet, Subotica, 2007

Recommended Literature:
2. Milović Lj.: Organizacija zdravstvene nege sa menadžmentom, udžbenik, Naučna knjiga, Beograd, 2004
3. Grujić V., Martinov-Cvejin M., Legetić B.: Menadžment u zdravstvu, udžbenik, Medicinski fakultet, Nov i Sad, 2007
4. Gras J. M.: Laboratory quality control and patient safety, De Gruyter, Paris, 2017
5. Bruce W.: Basic Quality Assurance and Quality Control in the Clinical Laboratory, Little Brown & Co, London, 2004
6. Morrisey M. A.: Health Insurance, Health Administration Press, 2007
7. Beik J. I.: Health Insurance Today: A Practical Approach, Saunders, Philadelphia, 2010

Course outcome (aligned with the study program outcomes):
After attending and passing the course, the student should be qualified to practically apply internal procedures and standards for the purpose of establishing and controlling the quality of services, to determine and rank quality criteria, to master techniques and methods for measuring and controlling quality, and to evaluate the application of established standards, with a special focus on the type of organization they belong to. Additionally, the student should be trained in how to adopt and implement corrective measures aimed at quality management.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Marko Carić, PhD, Professional Studies Professor Dudić Branislav, PhD, Professional Studies Professor
Teaching Associate:	Marko Carić, PhD, Professional Studies Professor Dudić Branislav, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

RESEARCH METHODOLOGY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Research Methodology					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-06-b	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: To equip students with the necessary skills for professional, scientific-research, and bibliographic-research work.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Importance of scientific work.				
Week II	Difference between scientific and professional work.				
Week III	Stages of professional, scientific-research, and bibliographic-research work.				
Week IV	Selection of topic and formulating a hypothesis.				
Week V	Selection of research methodology. Literature review. Methods of citing literature.				
Week VI	Experiment.				
Week VII	Surveys and processing of survey results, data protection.				
Week VIII	Statistical data processing.				
Week IX	Quality of the sample.				
Week X	Objectivity and subjectivity. Result, discussion and conclusion.				
Week XI	Structure and writing of professional and scientific work. Types of professional and scientific papers.				
Week XII	Valuation of professional and scientific papers.				
Week XIII	Ways of professional and scientific paper publishing.				
Week XIV	Citation.				
Week XV	Plagiarism. Protection of data. Methodology for preparing seminar and final papers.				
Methods of teaching: teaching activities, lectures using didactic materials, exercises, workshops, field teaching, and seminar paper.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Milankov V., Jakšić P.: Metodologija naučno-istraživačkog rada u biološkim disciplinama, udžbenik, Prirodno-matematički fakultet, Novi Sad, 2006
2. Šomođi Š., Novković N., Kraljević-Balalić M., Kajari K.: Uvod u naučni rad, udžbenik, Poljoprivredni fakultet, Novi Sad, 2004

Recommended Literature:

3. Conventional and electronic databases
4. Ebel H. F., Bliefert C., Russey W. E.: The art of scientific writing, Wiley-VCH, Verlag GmbH & Co. KgaA, Weinheim, 2004

Course outcome (aligned with the study program outcomes):

Possession of necessary knowledge that will enable students to engage in professional, scientific-research, and bibliographic-research work.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Marko Carić, PhD, Professional Studies Professor Srđan Stojanović, PhD, Professional Studies Professor
Teaching Associate:	Marko Carić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

SPECIALIZED ENGLISH FOR MEDICINE 1

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Specialized English for Medicine 1					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-01-g	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Course objective is familiarization with characteristics of the English language, adoption of phrases and patterns necessary for communication at professional level and adoption of techniques of written and oral expressing in professional communication.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Grammar: English alphabet, basic reading and writing rules, greeting.				
Week II	Grammar: Personal pronouns, possessive pronouns, present tenses, gender and number of nouns.				
Week III	Grammar: Numbers, colors, interrogative and affirmative sentences.				
Week IV	Aspects of everyday life in English-speaking countries: visiting a primary healthcare center (health clinic).				
Week V	Text processing: Illness.				
Week VI	Text processing: A walk in nature.				
Week VII	Prepositions with the dative and accusative cases; the imperative.				
Week VIII	Modal verbs, the present perfect tense, sentence structure.				
Week IX	Aspects of everyday life in English-speaking countries.				
Week X	Professional texts related to the student's future profession; professional vocabulary.				
Week XI	Examples of commercial and professional texts from practice.				
Week XII	Text processing: parts of the body.				
Week XIII	Text processing: medical equipment, hospitals, medical professions.				
Week XIV	Text processing: pharmacy, medicinal herbs.				
Week XV	Text processing: food, vitamins, nutrition, diet, cuisine.				
Methods of teaching: Lectures, practical exercises, communication activities, and e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Evans V., Dooley J., Tran T. M.: Career Paths, Medical Book 1, udžbenik, Express Publishing, Berkshire, 2012
2. Dragović R.: Engleski za zdravstvene radnike, udžbenik, Naučna knjiga, Beograd, 2014
3. Momčinović V., Tanay V., Žurić-Havelka S.: Medical English, udžbenik, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2008
4. Murphy R.: English Grammar in Use, Cambridge University Press, Cambridge, 2008
5. McCarthy M., O'Dell F.: English Vocabulary in Use, Cambridge University Press, Cambridge, 2006

Recommended Literature:

6. Hornby A. S.: Oxford Advanced Learner's Dictionary of Current English, Oxford University Pres, Oxford, 2008
7. MacLean J.: English in Basic Medical Science, Oxford University Press, Oxford, 2010

Course outcome (aligned with the study program outcomes):

Students will be able to apply the acquired knowledge in professional communication, create corresponding written forms in accordance with their professional communication and use speech patterns appropriate to a given situation.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Irena Petrušić, PhD, Professional Studies Professor
Teaching Associate:	Irena Petrušić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

SPECIALIZED ENGLISH FOR MEDICINE 2

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Specialized English for Medicine 2					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-izb-03-d	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: Specialized English for Medicine 1					
Course objective: Course objective is familiarization with characteristics of the English language, adoption of phrases and patterns necessary for communication at professional level and adoption of techniques of written and oral expressing in professional communication.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Grammar: Comparison of adjectives.				
Week II	Grammar: Cause-and-effect sentences, conditional sentences, future tense, past tense, subjunctive.				
Week III	Grammar: Verbs of motion, active and passive voice.				
Week IV	Grammar: Relative clauses.				
Week V	Grammar: Verbs with prepositions, suffixes and prefixes for forming adjectives.				
Week VI	Text processing: Aspects of everyday life in English-speaking countries: Holidays, family life, education.				
Week VII	Text processing: Aspects of everyday life in English-speaking countries: Urban life.				
Week VIII	Grammar: Dependent clauses.				
Week IX	Text processing: Geriatric center.				
Week X	Text processing: Dentist.				
Week XI	Text processing: Media.				
Week XII	Text processing: Surgery.				
Week XIII	Text processing: Waiting room in a health care facility.				
Week XIV	Text processing: Pharmacy.				
Week XV	Text processing: Maternity ward, childbirth.				
Methods of teaching: Lectures, practical exercises, communication activities, and e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Evans V., Dooley J., Tran T. M.: Career Paths, Medical Book 1, udžbenik, Express Publishing, Berkshire, 2012
2. Dragović R.: Engleski za zdravstvene radnike, udžbenik, Naučna knjiga, Beograd, 2014
3. Momčinović V., Tanay V., Žurić-Havelka S.: Medical English, udžbenik, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2008
4. Murphy R.: English Grammar in Use, Cambridge University Press, Cambridge, 2008
5. McCarthy M., O'Dell F.: English Vocabulary in Use, Cambridge University Press, Cambridge, 2006

Recommended Literature:

6. Hornby A. S.: Oxford Advanced Learner's Dictionary of Current English, Oxford University Pres, Oxford, 2008
7. MacLean J.: English in Basic Medical Science, Oxford University Press, Oxford, 2010

Course outcome (aligned with the study program outcomes):

Students will be able to apply the acquired knowledge in professional communication, create corresponding written forms in accordance with their professional communication and use speech patterns appropriate to a given situation.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Irena Petrušić, PhD, Professional Studies Professor
Teaching Associate:	Irena Petrušić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

SPORTS ACTIVITIES OF PERSONS WITH DISABILITIES

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Sports Activities of Persons with Disabilities

Course Code	Course Status	Year	Number of ECTS	Number of classes	
pft-23-b	mandatory	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Professional Physiotherapy

Prerequisites:
no

Course objective:
Acquisition of knowledge and skills for assessing a patient's daily needs and activities from a physiotherapy perspective, as well as the functional abilities necessary to perform them.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Types and degrees of disability.
Week II	Classification of sports activities according to the degree and type of disability.
Week III	Principles of training in sports activities. Team-based approach.
Week IV	Drawing up plan and programme of activities.
Week V	Assessment of the patient's functional abilities from a physiotherapy perspective.
Week VI	Activity analysis.
Week VII	Methods of practicing self-care activities and everyday life.
Week VIII	Selection of training methods.
Week IX	Selection of physiotherapy procedures.
Week X	Aids and adaptations for self-care and activities of disabled persons.
Week XI	The role of the physiotherapist and occupational therapist in the rehabilitation process of different categories of temporarily or permanently disabled patients (neurological, rheumatological, surgical).
Week XII	Methods in education and training of children in self-care
Week XIII	Self-care of elderly persons. Specific aspects of work in home-care settings.
Week XIV	The role of the family. Disability as a way of life.
Week XV	Psychological stability and willpower.

Methods of teaching:
Lectures, video presentations, case study analysis, seminar papers, exercises, and fieldwork.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature:

1. Kasum G.: Sport osoba sa invaliditetom, udžbenik, Fakultet sporta i fizičkog vaspitanja, Beograd, 2015
2. Indira J., Zehrudin J., Kada D., Adnan T.: Sport rekreacija i didaktičke igre osoba sa posebnim potrebama, udžbenik, Mark, Sarajevo, 2005
3. Vučić R., Marković P., Savković N.: Klinička radna terapija - praktikum sa terapeutskim medicinskim podsetnikom, Alternativa, Beograd, 2006
4. Kanjuh Ž.: Principi obučavanja u aktivnostima svakodnevnog života - praktikum za potrebe studenata smjera primjenjeni radni terapeut, Visoka medicinska škola, Beograd, 2011

Recommended Literature:

5. Delin A.: U susret osobama sa invaliditetom, Britanski savjet, Beograd, 2008
6. Playforth S.: Upoznavanje osoba sa invaliditetom, Britanski savjet, Beograd, 2008
7. Hayley F.: Disability and Youth Sport, Taylor & Francis, Boston, 2009

Course outcome (aligned with the study program outcomes):

The expected learning outcomes include training students to organize and implement specific sports activities for persons with disabilities, while the desired learning outcomes focus on enabling students to creatively participate in the design of these activities.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Ivana Kaćanski, PhD, Professional Studies Professor
Teaching Associate:	Vesna Bilafer, Teaching Associate, Master Professional Nurse Zlatko Ćirić, Teaching Associate, Master of Healthcare Organization

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

SPORTS MEDICINE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Sports Medicine					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
pft-mod-01-b	mandatory	third	10	lectures	45
				exercises	45
				other forms of active classes	0
				professional practice	300
Study programs for which it is organized: Bachelor of Applied Studies in Professional Physiotherapy					
Prerequisites: no					
Course objective: Acquisition of knowledge on the specificity of etiology, pathogenesis, course, prognosis, prevention, and treatment of sports injuries from the perspective of physiotherapy. Familiarization of students with the basics of sports physiology and sports medicine, as well as how organs and organ systems function in a heightened, altered regime of psychophysical exertion.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented by working weeks according to the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Physiatric diagnostics, assessment, and the planning and implementation of physiotherapy programs within the treatment and rehabilitation of acute endogenous and exogenous sports injuries; soft tissue injuries (contusions, strains, ruptures of musculotendinous tissues, and ligamentous–capsular lesions); and injuries of the osteoarticular system, including chronic endogenous sports injuries (overuse syndromes), as well as postoperative procedures within sports medicine (arthroscopic procedures and invasive orthopedic-surgical interventions).				
Week II	Neuro muscular sinapse. Mediators and basic mechanisms of synaptic transmission. Classification of muscles. Morphophysiological characteristics of striated (skeletal) muscles. Contraction of striated muscles. Motor unit. Muscle tone and thermogenesis. Muscle work, power, and fatigue.				
Week III	Physical aspects of human work (force, power, work). Smooth muscles. Properties of gases. Ventilation. Lung volumes and capacities. Gas transport to cells. Primary and accessory respiratory muscles. Intrapleural pressure.				
Week IV	Regulation of breathing. Types and patterns of breathing. Breathing under conditions of decreased and increased atmospheric pressure.				
Week V	Blood plasma. Erythrocytes. Leukocytes. Immunity and immune bodies. Platelets. Blood coagulation and hemostasis. Blood groups. Transfusion and transplantation. Functional division of the circulatory system.				
Week VI	Morphofunctional characteristics of the cardiac muscle. Cardiac hemodynamics. Cardiac conduction system. Athlete’s heart. Recording and analysis of the electrocardiogram (ECG).				
Week VII	Regulation of cardiac muscle activity. Exchange at the capillary level. Peripheral circulation. Pulse: definition, types, and characteristics. Venous circulation. Lymph flow.				

Week VIII	Neurohumoral mechanisms of regulation of blood vessel tone. Structural and energy role of nutrients; energy sources in the human body. Anabolism and catabolism. Minerals and vitamins. Methods of studying energy metabolism; energy storage.
Week IX	Respiratory quotient. Glycogen supercompensation. Lactic acid. Basal metabolism. Energy metabolism during physical exertion. Planning a daily dietary intake. Regulation of acid–base balance. Chemical and physiological buffers. Regulation of glycemia. Regulation of calcium levels in the body.
Week X	Regulation of protein metabolism (the effect of physical activity on anabolic processes in the body). Membrane potential. Action potential.
Week XI	Laws of excitability. Neuron. Classification of synapses in the CNS. Neurotransmitters. Reflex function. Basal ganglia and formation of dynamic stereotypes.
Week XII	Cerebellum, vestibular system, proprioception, and the role of balance. Tactile and thermal reception. Visceroreception. Olfactory and gustatory reception.
Week XIII	Pain reception. Hypothalamus. Limbic structures of the brain. Cerebral cortex. Sleep. Learning and memory. Consciousness. Energy capacities and their measurement. Steady state.
Week XIV	Sports training and types of training. Stress theory, phases of stress, stressors. The role of sport and recreation according to the modern theory of functional systems in the reception and adaptation of the organism to harmful effects of stress.
Week XV	The occurrence of overtraining and its implications for athletes' functional abilities; occurrence of injuries. Chronobiology and its significance in sports.

Methods of teaching:
Lectures, exercises, case analysis, discussion, e-learning, and clinical practice.

Student workload:

weekly: 6	per semester: 90

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Grujić N.: Fiziologija sporta, udžbenik, Futura, Petrovaradin, 2010
2. Pećina M. i sar.: Sportska medicina, udžbenik, Medicinski fakultet, Zagreb, 2013
3. Banović D.: Povrede u sportu, udžbenik, Draslar partner, Beograd, 2006
4. Barak O. i sar.: Praktikum iz fiziologije sporta, Futura, Petrovaradin, 2006
5. Nikolić Ž.: Fizikalna terapija lokomotornog aparata, Zavod za izdavanje udžbenika i nastavnih sredstava, Beograd, 2012
6. Pećina M.: Sindromi prenaprezanja sustava za kretanje, Globus, Zagreb, 2006
Recommended Literature:
7. Costill D, Wilmore J.: Physiology of Sport and Exercise, Human Kinetics, Ravena Press, London, 2015

Course outcome (aligned with the study program outcomes):
Upon completion of the course and successful passing of the exam, the student will have mastered the general principles and rules of conduct in a sports laboratory, become familiar with basic laboratory procedures for functional testing, and acquired the skills required to perform laboratory tests. The student will be thoroughly familiar with the procedures for collecting and preparing blood and urine samples, as well as with the methods of basic laboratory analyses of blood and urine used in sports medicine practice. In addition, the student will have mastered basic electrophysiological methods, gained experience in performing recordings, is able to recognize basic recorded parameters, independently measure arterial blood pressure, perform cardiac auscultation, and determine respiratory volumes, capacities, and oxygen consumption, among other procedures.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-
Full name of the lecturers and teaching associates:			
Lecturer:	Ivana Kaćanski, PhD, Professional Studies Professor		
Teaching Associate:	Zoran Tešić, Teaching Associate, Specialist in Applied Physiotherapy Vesna Bilafer, Teaching Associate, Master Professional Nurse		
Specific features that need to be emphasized for the course: no			
Note (if applicable): no			