

	UCNI NACRT PREDMETA/COURSE SYLLABUS
Predmet	Osnove klinične medicine 2
Course title	Basics of Clinical Medicine 2

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Fizioterapija / I. stopnja Physiotherapy / I st Cycle	Ni smeri študija No study field	2. letnik 2 nd year	3. 3 rd

Vrsta predmeta/Course type obvezni/obligatory

Univerzitetna koda predmeta/University course code FTH 2 UN 2

Predavanja Lectures	Sem. vaje Tutorial	Kab. vaje Cabinet tutorial	Lab. vaje Laboratory work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
60	15				75	5

Nosilec predmeta/Lecturer:

Jeziki/ Languages:	Predavanja/Lectures:	slovenski/Slovenian
	Vaje/Tutorial:	slovenski/Slovenian

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	Prerequisites:
Vpis v drugi letnik študijskega programa.	A prerequisite for inclusion is enrolment in the second year of study.

Vsebina:	Content (Syllabus outline):
<ul style="list-style-type: none"> <i>Fizikalna in rehabilitacijska medicina.</i> Rehabilitacija na vseh nivojih primarnega, sekundarnega in terciarnega zdravstvenega varstva. <ul style="list-style-type: none"> - Orientacijska stopenjska diagnostika pri boleznih in poškodbah gibal, nevroloških okvarah, boleznih srca in ožilja ter pri dihalnih motnjah. - Zdravljenje, zapleti in kriteriji pri napotitvi tovrstnih bolnikov na fizikalno zdravljenje. - Osnovne metode fizikalnega zdravljenja. 	<ul style="list-style-type: none"> <i>Physical and rehabilitation medicine.</i> Rehabilitation at all levels of primary, secondary and tertiary health care. <ul style="list-style-type: none"> - Orientational stage diagnostics in musculoskeletal diseases and injuries, neurological disorders, cardiovascular diseases and respiratory disorders. - Treatment, complications and criteria for referral of such patients to the physical therapy. - Basic methods of physical treatment.

<ul style="list-style-type: none"> - Osnove kineziterapije, mehanoterapije, limfne drenaže in presoterapije, hipobarične terapija, sonoterapije, termoterapije in krioterapije, hidrototerapije, elektroterapije, diatermije, magnetoterapije, fototerapije in helioterapije. - Indikacije in kontraindikacije za posamezne vrste fizikalnega zdravljenja. - Balneoterapija in klimatoterapija. - Psihološki vidik rehabilitacije in socialna problematika. - Poklicna rehabilitacija. - Pomen redne vadbe pri starostnikih. - Promocija zdravja, zdravstvena vzgoja ter ohranjanje in izboljševanje kakovosti življenja. - Vloga fizioterapije v rehabilitaciji. - Komunikacija z drugimi zdravstvenimi delavci v rehabilitacijskem timu. Spremljanje ambulantne, hospitalne in zdraviliške rehabilitacije. <ul style="list-style-type: none"> • <i>Posebnosti rehabilitacije pri nekaterih bolezenskih stanjih.</i> • <i>Interna medicina:</i> <ul style="list-style-type: none"> - Vzroki internističnih bolezni (prirojene nepravilnosti, dedni dejavniki, okužbe, degenerativne spremembe, maligne bolezni). - Pomembni simptomi in znaki (bolečina, mrzlica in zvišana telesna temperatura, sinkopa in epileptični napadi, omotica in vrtoglavica, zmedenost, stupor in koma, dispneja, kašelj in hemoptiza, cianoza, edem, šok, slabost in bruhanje, izguba in povečanje telesne mase, driska, zaprtje, krvavitev iz prebavil, zlatenica, ascites, nenormalnosti mokrenja). - Diagnostični in terapevtski postopki v interni medicini. - Preveniriva internističnih bolezni. - Akutna/Kronična obolenja. - Urgentna stanja v interni medicini (srčno popuščanje, dihalno popuščanje, ledvična odpoved, jetrna odpoved). - Bolezni dihal (diagnostični postopki, pljučnice, KOPB, bronhialna astma, 	<ul style="list-style-type: none"> - Fundamentals of kinesiotherapy, mechanotherapy, lymphatic drainage and pressotherapy, hypobaric therapy, sonotherapy, thermotherapy and cryotherapy, hydrotherapy, electrotherapy, diathermy, magnetotherapy, phototherapy, and heliotherapy. - Indications and contraindications for certain types of physical therapy. - Balneotherapy and climatotherapy. - Psychological aspects of rehabilitation and social issues. - Professional rehabilitation. - The importance of regular exercise in older people. - Promoting health, health education and preserving and improving the quality of life. - The role of physiotherapy in rehabilitation. - Communication with other health professionals in the rehabilitation team. Monitoring clinical rehabilitation in ambulatory care clinics, hospitals and health resorts. <ul style="list-style-type: none"> • <i>The specifics of rehabilitation in some illnesses.</i> • <i>Internal Medicine:</i> <ul style="list-style-type: none"> - Causes of internal medicine diseases (congenital abnormalities, hereditary factors, infections, degenerative changes, malignant diseases). - Important symptoms and signs (pain, chills and fever, syncope and seizures, dizziness and vertigo, confusion, stupor and coma, dyspnea, cough and haemoptysis, cyanosis, edema, shock, nausea and vomiting, weight loss and weight gain, diarrhea, constipation, gastrointestinal bleeding, jaundice, ascites, abnormalities in urinary function). - Diagnostic and therapeutic procedures in internal medicine. - Prevention of internal diseases. - Acute/Chronic diseases.
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<p>pljučni rak, rehabilitacija, trajno zdravljenje s kisikom na domu).</p> <ul style="list-style-type: none"> - Bolezni srca in ožilja (diagnostični postopki, bolezni zaklopok, koronarna bolezen, zvišan krvni tlak, aritmije in srčni spodbujevalec, periferna arterijska okluzivna bolezen, rehabilitacija). - Globoka venska tromboza (vzroki, simptomi, diagnostika in terapija), pljučna embolija (vzroki, simptomi, diagnostika in terapija z antikoagulanti, rehabilitacija). - Motnje uriniranja in urodinamske preiskave, intermitentna čista kateterizacija. - Sladkorna bolezen (oblike, odkrivanje, akutni in kronični zapleti, zdravljenje, samonadzor). - Bolezni krvi in krvotvornih organov (anemije, bolezni levkocitov, bolezni trombocitov in motnje hemostaze, posebnosti fizioterapije pri hematoloških bolnikih). - Revmatične bolezni (vnetne oblike revmatizma: bolezni, klinična slika, diagnostika, terapija, rehabilitacija; osteoartroza: bolezni, klinična slika, diagnostika, terapija, rehabilitacija). - Onkologija. Rak v Sloveniji- incidenca, ozdravljivost, posledice. Mednarodna klasifikacija funkcioniranja, zmanjšane zmožnosti in zdravja (MFK) kot osnova za rehabilitacijo. Načela rehabilitacije. Pregled fizikalne terapije s poudarkom na indiciranosti in kontraindiciranosti. Posebnosti fizioterapije. Zdravljenje bolečine. Celostna rehabilitacija bolnika. <ul style="list-style-type: none"> • <i>Nevrologija:</i> <ul style="list-style-type: none"> - Anatomija centralnega živčevja, topografska razdelitev, funkcija. - Anatomija perifernega živčevja topografska razdelitev, funkcija. - Anatomija avtonomnega živčevja, razdelitev, funkcija (mokrenje, iztrebljanje, spolna funkcija, uravnavanje krvni pritisk, potenje). - Nevrološki status. - Diagnostika v nevrologiji, klinična postavitev mesta okvare, diferencialna 	<ul style="list-style-type: none"> - Medical emergencies in internal medicine (heart failure, respiratory failure, renal failure, liver failure). - Respiratory diseases (diagnostic procedures, pneumonia, COPD, bronchial asthma, lung cancer, rehabilitation, continuous oxygen therapy at home). - Cardiovascular diseases (diagnostic procedures, valvular diseases, coronary artery disease, hypertension, arrhythmia and pacemaker, peripheral occlusive vascular disease, rehabilitation). - Deep vein thrombosis (etiology, symptoms, diagnostic procedures, therapy), pulmonary embolism (etiology, symptoms, diagnostic procedures, therapy with anticoagulants, rehabilitation). - Urinary disorders and urodynamic tests, intermittent pure catheterisation. - Diabetes mellitus (forms, diagnosis, acute and chronic complications, treatment, self-monitoring). - Blood and blood forming organs diseases (anemia, leukocyte disease, platelet and hemostatic disorders, special features of physiotherapy in hematologic patients). - Rheumatic diseases (inflammatory forms of rheumatism: diseases, symptoms, diagnostic procedures and therapy, rehabilitation; osteoarthritis: diseases, symptoms, diagnostic procedures and therapy, rehabilitation). - Oncology. Cancer in Slovenia- incidence, survival, consequences. International classification of functioning, disability and health (ICF) as a basis for rehabilitation. Principles of rehabilitation. Overview of physical therapy with an emphasis on indication and contraindication. Special characteristics of physical therapy. Pain treatment. Comprehensive rehabilitation. <ul style="list-style-type: none"> • <i>Neurology:</i> <ul style="list-style-type: none"> - Anatomy of the central nervous system, topographic division, function.
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<p>diagnoza glede na klinični potek ter predvidena diagnostika.</p> <ul style="list-style-type: none"> - Ishemična možganska kap (patofiziologija, klinična slika, diagnostika, terapija, rehabilitacija). - Znotraj-možganska krvavitev (patofiziologija, klinična slika, diagnostika, terapija, rehabilitacija). - Poškodbe glave (patofiziologija, klinična slika, diagnostika, terapija, rehabilitacija). - Okvare hrbtenjače (patofiziologija, klinični sindromi, klinična prezentacija). - Demielinizacijske bolezni centralnega živčevja (multipla skleroza, ADEM, itd). - Nevropatska bolečina (ločevanje nociceptivne od nevropatske bolečine, patofiziologija, zdravljenje). - Razvojne, prirojene nevrološke bolezni, cerebralna paraliza, itd. - Glavobol (primarni/sekundarni, terapija). - Možganski tumorji (pregled možganskih tumorjev, zdravljenje, prognoza). - Vnetne bolezni centralnega živčevja (etiologija, zdravljenje). - Epileptični napad/status (patofiziologija, prepoznavanje vrste napada, diagnostika, zdravljenje, obravnava epileptičnega statusa). - Motnje zavesti (kvantitativne in kvalitativne motnje zavesti, obravnava bolnika z motnjo zavesti). - Demence (pregled demenc, diagnostika, zdravljenje) - Delirij (definicija, vzroki za nastanek, zdravljenje). - Ekstrapiramidne motnje gibanja (prepoznavanje, diagnostika, zdravljenje, Parkinsonova bolezen in ostali parkinsonizmi plus). - Poškodbe perifernega živčevja (patofiziologija, diagnostika, zdravljenje). - Bolečina v križu (patofiziologija, najpogostejši nevrološki vzroki, diferencialna diagnoza, diagnostika, zdravljenje). - Bolečina v vratu (patofiziologija, najpogostejši nevrološki vzroki, diferencialna diagnoza, diagnostika, zdravljenje). 	<ul style="list-style-type: none"> - Anatomy of the peripheral nervous system topographic division, function. - Anatomy of the autonomic nervous system, division, function (urinating, defecation, sexual function, blood pressure control, sweating). - Neurological status. - Diagnostics in neurology, clinical setting of the location of the disorder, differential diagnosis according to the clinical course and the diagnostic provided. - Ischemic stroke (pathophysiology, symptoms, diagnostics, therapy, rehabilitation). - Intracranial hemorrhage (pathophysiology, symptoms, diagnostics, therapy, rehabilitation). - Head Injuries (pathophysiology, symptoms, diagnostics, therapy, rehabilitation). - Spinal cord lesions (pathophysiology, symptoms, clinical presentation). - Demyelinating diseases of the central nervous system (multiple sclerosis, ADEM, etc.). - Neuropathic pain (separation of nociceptive from neuropathic pain, pathophysiology, treatment). - Developmental, congenital neurological diseases, cerebral paralysis, etc. - Headache (primary/secondary, therapy). - Brain tumours (review of brain tumours, treatment and prognosis). - Inflammatory diseases of the central nervous system (etiology, treatment). - Epileptic seizures / status (pathophysiology, recognition of type of attack, diagnostics, treatment, treatment of epileptic status). - Disturbances of consciousness (quantitative and qualitative disorders of consciousness, treatment of a patient with disturbance of consciousness). - Dementia (review of dementia, diagnosis, treatment). - Delirium (definition, causes, treatment).
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<ul style="list-style-type: none"> - Utesnitvene nevropatije (patofiziologija, diagnostika, zdravljenje). - Živčno-mišične bolezni (patofiziologija, najpogostejše bolezni, zdravljenje). - Bolezen motoričnega nevrona (klinična slika, diferencialna diagnoza, diagnostika, zdravljenje). - Motnje govora, požiranja (vrste afazij, klinična prezentacija, motnje požiranja). - Motnje vida (nevrološke motnje vida, nenevrološke motnje vida). - Vrtoglavica in sinkopa (vzroki, najpogostejše oblike vrtoglavice, zdravljenje). - Akutno poslabšanje nevrološkega stanja pri bolniku z nevrološko boleznijo (vzroki, prepoznavna, terapija). <ul style="list-style-type: none"> • <i>Seminarske vaje:</i> <ul style="list-style-type: none"> - <i>Interna medicina:</i> Kardiovaskularna rehabilitacija. Respiratorna fizioterapija. Rehabilitacija v revmatologiji in onkologiji. Klinični primeri bolnikov. - <i>Nevrologija:</i> Nevrološki status. Klinični primeri bolnikov. EMG. 	<ul style="list-style-type: none"> - Extrapiramidal movement disorders (recognition, diagnosis, treatment, Parkinson's disease and other parkinsonism plus). - Peripheral nerve injury (pathophysiology, diagnostics, treatment). - Lower back pain (pathophysiology, the most common neurological causes, differential diagnosis, diagnosis, treatment). - Pain in the neck (pathophysiology, the most common neurological causes, differential diagnosis, diagnostics, treatment). - Compressive neuropathy (pathophysiology, diagnosis, treatment). - Neuromuscular diseases (pathophysiology, the most common diseases, treatment). - Motor neuron disease (symptoms, differential diagnosis, diagnosis, treatment). - Speech disorders, swallowing (types of aphasia, clinical presentation, swallowing disorders). - Visual disturbances (neurological disturbances, no-neurological visual disturbances). - Dizziness and syncope (causes, the most frequent forms of vertigo, treatment). - Acute worsening of the neurological condition of a patient with a neurological disease (causes, recognition, therapy). <ul style="list-style-type: none"> • <i>Tutorial:</i> <ul style="list-style-type: none"> - <i>Internal medicine:</i> Cardiovascular rehabilitation. Respiratory physiotherapy. Rehabilitation in rheumatology and oncology. Clinical cases of patients. - <i>Neurology:</i> Neurological status. Clinical cases of patients. EMG.
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Temeljna literatura in viri/Readings:

Temeljna literatura/Basic literature

- Erjavec, T. in Karan K. (2014). *Rehabilitacijska zdravstvena nega*. Ljubljana: Univerzitetni rehabilitacijski inštitut Republike Slovenije- Soča.

- Štefančič, M. (2003). *Osnove fizikalne medicine in rehabilitacije gibalnega sistema*. Ljubljana: DZS.
- Tomšič, M. in Praprotnik, S. (2013). *Revmatološki priročnik za družinskega zdravnika, 5. dopolnjena izdaja*. Ljubljana.
- Turk, Z. (2002). *Fizikalna in rehabilitacijska medicina*. (Skripta za interno uporabo). Maribor: VZŠ Univerze v Mariboru.

Priporočljiva literatura/Recommended literature

- Jajić I. in Jajić Z. (2004). *Fizijatrijsko-reumatološka propedeutika*. Zagreb: Medicinska naklada.
- Jajić I. in Jajić Z. (2008). *Fizikalna i rehabilitacijska medicina: osnove i liječenje*. Zagreb: Medicinska naklada.
- Frontera W. R. (2013). *DeLisa's Physical Medicine and Rehabilitation*. Wolters Kluwer Health.

Cilji in kompetence:

Učna enota prispeva predvsem k razvoju naslednjih splošnih in specifičnih kompetenc:

- uporaba teoretičnega in praktičnega znanja pri organizaciji, načrtovanju in izvajanju dela,
- poznavanje in upoštevanje zdravstvene zakonodaje, spoštovanje moralnih načel ter etično ravnanje,
- presojanje kakovosti lastnega dela z uporabo zanke kakovosti (Demingov krog): planiranje, izvedba, evalvacija in uvedba predvidenih ukrepov,
- samostojno in odgovorno vseživljenjsko učenje na svojem strokovnem področju,
- vzgojno, izobraževalno in mentorsko delo,
- poznavanje načel fizioterapevtske obravnave,
- izvajanje fizioterapije s pomočjo ustreznih fizioterapevtskih metod in tehnik,
- prepoznavanje, spoštovanje, upoštevanje in vključevanje individualnih potreb pacientov v njihovo fizioterapevtsko obravnavo,
- evalviranje rezultatov in učinkovitosti terapije (kritična refleksija),
- poznavanje, načrtovanje in uporabo metod in tehnik s specialnih področij fizioterapije, ki jih razvijajo izbirni moduli in izbirni predmeti (termalno zdravljenje,

Objectives and competences:

The learning unit mainly contributes to the development of the following general and specific competences:

- using theoretical and practical knowledge in organisation, planning and implementation of activities,
- knowledge and consideration of healthcare legislation, respect for moral principles and values, and ethical behaviour,
- evaluating personal work quality by using the quality loop (the Deming Cycle): planning, implementation, evaluation, and introduction of the anticipated measures,
- independent and responsible lifelong learning in one's professional field,
- educational work and mentorship,
- knowing the principles of the physiotherapeutic treatment,
- implementing physiotherapy by using the appropriate physiotherapeutic methods and techniques,
- recognising, respecting, considering and including the individual needs of patients into their physiotherapeutic treatment,
- evaluating results and effectiveness of the therapy (critical reflexion),
- knowing, planning and using methods and techniques in the special areas of physiotherapy, being developed by

kineziologija, geriatrična fizioterapija, promocija zdravega življenjskega sloga).	elective modules and elective courses (thermal treatment, kinesiology, geriatric physiotherapy, promotion of healthy lifestyle).
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Predvideni študijski rezultati:

Študent/študentka:

- pozna stopenjsko diagnostiko pri boleznih gibal, nevroloških okvarah, boleznih srca in ožilja ter pri dihalnih motnjah, zdravljenje, zaplete in kriterije pri napotitvi tovrstnih bolnikov na fizikalno zdravljenje, pozna osnovne metode fizikalnega zdravljenja, indikacije in kontraindikacije za posamezne vrste fizikalnega zdravljenja,
- razume principe fizikalne diagnostike, respiratorne terapije, trombopofilakse, termoterapije, mehanoterapije, hidroterapije, fototerapije, elektroterapije, kineziterapije in metod vertikalizacije, delovne terapije,
- se usposobi za ustrezno racionalno predpisovanje storitev fizikalne medicine, odgovornostjo, ki je povezana s predpisovanjem fizikalne medicine, kritično presojo in analizo rezultatov ter predvidevanje učinkovitosti terapije,
- prepozna pomen prepoznavanja osebnih in poklicnih vrednot, odnosov, prepričanij in motivov,
- razvije empatično komunikacijo v interakciji s pacienti v terapevtski obravnavi,
- razvije veščine etičnega odnosa z različnimi ljudmi vključenimi v proces zdravljenja,
- se usposobi za spremljanje kazalcev kakovosti.

Intended learning outcomes:

Students:

- know the stage diagnostics in musculoskeletal diseases, neurological disorders, cardiovascular diseases and respiratory disorders, treatment, complications and criteria for referral of such patients to physical therapy, know the basic methods of physical therapy, indications and contraindications for individual types of physical therapy,
- understand the principles of physical diagnostics, respiratory therapy, thromboprophylaxis, thermotherapy, mechanotherapy, hydrotherapy, phototherapy, electrotherapy, kinesiotherapy and verticalisation methods, work therapy,
- are trained for the appropriate rational prescription of physical therapy, and the related responsibility, for the critical assessment and analysis of results, and for prediction of the effectiveness of therapy,
- recognise the importance for detecting personal and professional values, attitudes, beliefs and motives,
- develop empathic communication in interaction with patients in the therapeutic treatment,
- develop skills for an ethical relationship with various people involved in the treatment,
- are trained for monitoring the quality indicators.

Metode poučevanja in učenja:

- *predavanja* z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov),
- *seminarske vaje*: priprava, predstavitev in uspešen zagovor projektne/raziskovalne

Learning and teaching methods:

- *lectures* with active student participation (explanation, discussion, questions, examples, problem solving),
- *tutorial*: preparation, presentation and a successful defence of a project paper,

naloge, portfolio (reševanje problemov, študije primera, kritično presojanje, diskusija, refleksija izkušenj, vrednotenje, projektno delo, timsko delo).	portfolio (problem solving, case studies, methods of critical thinking, discussion, reflection of experience, evaluation, project work, team work).
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		Delež (v %) Weight (in %)	Assessment:
Načini ocenjevanja:			
Način: <ul style="list-style-type: none"> • izpit • izdelava, predstavitev in zagovor projektne/raziskovalne naloge 		80 % 20 %	Types: <ul style="list-style-type: none"> • exam • preparation, presentation and defence of the project/research paper
Ocenjevalna lestvica: ECTS.			Grading scheme: ECTS.