

	UČNI NAČRT PREDMETA/COURSE SYLLABUS
Predmet	Menedžment celjenja in regeneracije
Course title	Healing and Regeneration Management

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

Vrsta predmeta/Course type obvezni/obligatory

Univerzitetna koda predmeta/University course code 2_FTH_2_UN2

Predavanja	Seminar	Sem. vaje	Lab. vaje	Teren. vaje	Samost. delo	ECTS
Lectures	Seminar	Tutorial	Laboratory work	Field work	Individ. work	
30		30			180	8

Nosilec predmeta/Lecturer:

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

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	Prerequisites:
<ul style="list-style-type: none"> Vpis v drugi letnik študijskega programa. Študent mora pred izpitom pripraviti in predstaviti ter zagovarjati projektno/raziskovalno nalogo. 	<ul style="list-style-type: none"> A prerequisite for inclusion is enrolment in the second year of study. Student has to prepare, present and defend a project/research paper before the exam.

Vsebina:	Content (Syllabus outline):
<ul style="list-style-type: none"> <i>Uvod</i> (definicija celjenja in regeneracije ter njune razlike). <i>Ligamenti</i> (struktura in histologija ligamentov, njihova funkcija, mehanizmi poškodb, stopnje poškodb ligamentov, celjenje ligamentov, primeri kirurškega in konzervativnega zdravljenja poškodb ligamentov). <i>Kite</i> (struktura in histologija kit, njihova funkcija, mehanizmi poškodb, stopnje poškodb kit, celjenje kit, primeri kirurškega in konzervativnega zdravljenja poškodb kit). <i>Mišice</i> (struktura in histologija mišic, njihova funkcija, mehanizmi poškodb, 	<ul style="list-style-type: none"> <i>Introduction</i> (definition of healing and regeneration and their differences). <i>Ligaments</i> (structure and histology of ligaments, their function, mechanisms of injuries, degrees of ligament injuries, ligament healing, cases of surgical and conservative treatment of ligament injuries). <i>Tendons</i> (tendon structure and histology, their function, injury mechanisms, tendon injury rates, tendon healing, examples of surgical and conservative treatment of tendon injuries).

<p>stopnje poškodb mišic, celjenje mišic, primeri kirurškega in konzervativnega zdravljenja poškodb mišic).</p> <ul style="list-style-type: none"> • <i>Hrustanec</i> (struktura in histologija hrustanca, njegova funkcija, mehanizmi poškodb, stopnje poškodb hrustanca, celjenje hrustanca, primeri kirurškega in konzervativnega zdravljenja poškodb hrustanca). • <i>Kosti</i> (struktura in histologija kosti, njihova funkcija, mehanizmi poškodb, stopnje poškodb kosti, celjenje kosti, primeri kirurškega in konzervativnega zdravljenja poškodb kosti). • <i>Živec</i> (struktura in histologija živca, njihova funkcija, mehanizmi poškodb, stopnje poškodb živca, celjenje živca, primeri kirurškega in konzervativnega zdravljenja poškodb živca). • <i>Menedžment zlomov s poudarkom na mehanizmih</i> (zaprta prepozicija, odprta repozicija in fiksacija, zunanja fiksacija in trakcija). • <i>Napredne metode zdravljenja, ki prispevajo k boljšemu celjenju in regeneraciji s poudarkom na hialuronski kislini, PRP, matičnih celicah, faktorju rasti.</i> 	<ul style="list-style-type: none"> • <i>Muscles</i> (muscle structure and histology, their function, injury mechanisms, muscle injury rates, muscle healing, examples of surgical and conservative treatment of muscle injuries). • Cartilage (structure and histology of cartilage, its function, mechanisms of injuries, degrees of cartilage damage, cartilage healing, cases of surgical and conservative treatment of cartilage injuries). • Bones (structure and histology of bones, their function, mechanisms of injuries, degrees of bone injuries, bone healing, examples of surgical and conservative treatment of bone injuries). • Nerve (nerve structure and histology, their function, injury mechanisms, nerve injury rates, nerve healing, cases of surgical and conservative treatment of nerve injuries). • Fracture management with emphasis on mechanisms (closed preposition, open reposition and fixation, external fixation and traction). • Advanced treatment methods that contribute to better healing and regeneration with emphasis on hyaluronic acid, PRP, stem cells, growth factor.
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Temeljna literatura in viri/Readings:

Temeljna literatura/Basic literature

- Duthie, B. R. (1996). *Mercers Orthopaedic Surgery*. London: Arnold.
- Korkusuz, F. (2016). *Muscoskeletal Research and Basic Science*. London. Springer.

Priporočljiva literatura/Recommended literature

- Miller, M. in Thompson, S. (2014). *DeLee & Drez's Orthopaedic Sports Medicine*.
- 4th Edition. 2-Volume Set. Philadelphia: Elsevier Saunders.
- Kjær, M., Krogsgaard, M., Magnusson, P., Engebretsen, L., Roos, H., Takala, T. idr. (2008). *Textbook of Sports Medicine. Basic Science and Clinical Aspects of Sports Injury and Physical Activity*. Oxford: Blackwell Publishing.
- Raffensperger, M. (2020). *Orthopedic Interventions for the Physical Therapist Assistant*. F.A. Davis. Philadelphia.

Cilji in kompetence:

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

Objectives and competences:

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

<ul style="list-style-type: none"> • preučevati temeljne znanstvene veje in jih uporabiti v fizioterapiji, • raziskovati sodobni znanstveni pristop in metode, • sposobnost kreativne uporabe znanja v strokovnem/poslovnem okolju, • usposobljenost za kakovostno in varno strokovno delo na področju fizioterapije, • razumevanje procesov regeneracije tkiv in sposobnost uporabe tega znanja za načrtovanje fizioterapevtske obravnave v procesu rehabilitacije. 	<ul style="list-style-type: none"> • study basic scientific branches and use them in physiotherapy, • research modern scientific approaches and methods, • the ability to use knowledge creatively in a professional / business environment, • qualification for high quality and safe professional work in the field of physiotherapy. • understanding of the processes of tissue regeneration and the ability to apply this knowledge in planning physiotherapy treatment in the rehabilitation process.
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Predvideni študijski rezultati:

Študent/študentka:

- pozna proces celjenja in regeneracije poškodb vezi, kite, mišice, hrustanca, kosti in živca,
- pozna mehanizme poškodb vezi, kite, mišice, hrustanca, kosti in živca,
- pozna različne stopnje poškodb vezi, kite, mišice, hrustanca, kosti in živca,
- razvija sposobnost samostojnega prepoznavanja posameznih poškodb, njihovo klinično sliko, diagnostiko in metode zdravljenja,
- usposobi se prepoznati različne faze celjenja in uporabe različnih fizioterapevtskih pristopov.

Intended learning outcomes:

Students:

- know the process of healing and regeneration of damage to ligaments, tendons, muscles, cartilage, bones and nerves,
- know the mechanisms of damage to ligaments, tendons, muscles, cartilage, bone and nerve,
- know the different degrees of damage to ligaments, tendons, muscles, cartilage, bones and nerves,
- develop the ability to independently identify individual injuries, their clinical picture, diagnosis and treatment methods,
- are able to identify different phases of healing and the use of different physiotherapeutic approaches.

Metode poučevanja in učenja:

- *predavanja* z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov),
- *seminarske vaje*: priprava, predstavitev in uspešen zagovor projektne/raziskovalne naloge (reševanje problemov, študije primera, kritično presojanje, diskusija, refleksija izkušenj, vrednotenje, projektno delo, timsko delo).

Learning and teaching methods:

- *lectures* with active student participation (explanation, discussion, questions, examples, problem solving),
- *seminar tutorial*: preparation, presentation and successful defence of a project/research paper (problem solving, case studies, methods of critical thinking, discussion, reflection on experience, evaluation, project work, teamwork).

Načini ocenjevanja:	Delež (v %) Weight (in %)	Assessment:
Načini: <ul style="list-style-type: none"> • izpit • izdelava, predstavitev in zagovor projektne/raziskovalne naloge Ocenjevalna lestvica: ECTS.	70 % 30 %	Types: <ul style="list-style-type: none"> • examination • preparation, presentation and defence of the project/research paper Grading scheme: ECTS.