



Table 2

3.2. Course description

Basic description		
Course coordinator	Prof. dr. sc. Branko Šestan	
Course title	Scientific elements of manual therapy	
Study programme	Physiotherapy graduated study	
Course status	elective	
Year	1	
ECTS credits and teaching	ECTS student 's workload coefficient	2,5
	Number of hours (L+E+S)	25(15+0+10)

1. COURSE DESCRIPTION
<i>1.1. Course objectives</i>
To introduce students to the scientific bases of manual therapy and evidence of impact, indications and contraindications of manual therapy. Critical consideration in the planning process that includes physical therapy and various methods of manual therapy.
<i>1.2. Course enrolment requirements</i>
- None
<i>1.3. Expected course learning outcomes</i>
<p>General competencies:</p> <p>At the end of the course Scientific foundations of manual medicine is expected that the student will be able to:</p> <ul style="list-style-type: none"> • assessing, analyzing and critical interpretation of the facts essential to select appropriate treatment • The application, implementation and adaptation of appropriate manual treatment • Students will qualify for analyzing, interpreting and evaluating scientific literature, in order to integrate scientifically based manual therapy in practice <p>Specific competencies</p> <p>At the end of the course is expected that the student will be able to:</p> <ol style="list-style-type: none"> 1. understand the physiological process of healing and the different effects of manual therapy in different stages of healing 2. understand the scientific foundations of musculoskeletal dysfunction 3. understand the scientific foundations of neuromuscular dysfunction 4. explain the effect of manual therapy on blood circulation 5. explain the effect of manual therapy on connective tissue and the adaptive processes 6. explain the effect of manual therapy on muscle tone 7. explain the proprioceptive effects of manual therapy 8. explain the psychophysiological basis of manual therapy 9. explain the mechanism of pain manual therapy
<i>1.4. Course content</i>
<ol style="list-style-type: none"> 1. historical origins of manual therapy 2. physiological basis of manual therapy 3. theories of musculoskeletal and neuromuscular dysfunction 4. manual therapy and physiotherapy



- The definition of manual therapy
 - Manual therapy as an integral part of the physiotherapy
 - Isolated and cumulative effect of manual therapy, physiotherapy and other procedures (science-based evidence - searching literature and databases)
5. indications and contraindications for manual therapy
 6. the effect of manual therapy on the tissue level
 - Effect on the healing process
 - Effect on blood circulation
 - Effect on the adaptation of tissues
 - The effect on local pain
 - A Case
 7. the effect of manual therapy on the neurological level
 - Proprioceptive stimulation through manual therapy
 - Effect on the peripheral nervous system
 - Effect on the neurological structures in musculoskeletal damages
 - Options in the treatment of psychomotor disorders and behavioral disorders
 - A neurological mechanism for relieving pain manual therapy
 - Effects on muscle tone
 - A Case
 8. psychological and psycho physiological processes in manual therapy
 - Origins of the therapeutic potential of touch
 - The psychological effect of manual therapy
 - Psychophysiology of manual therapy
 - Touch as a therapeutic intervention
 - Psychological mechanisms which eliminate the pain of manual therapy
 - A Case

1.5. *Teaching methods*

- X lectures
 X seminars and workshops
 exercises
 long distance education
 fieldwork

- individual assignment
 multimedia and network
 laboratories
 mentorship
 other

1.6. *Comments*

1.7. *Student's obligations*

Regular attendance to lectures and seminars and exercises. Preparation of course material to be discussed during seminars.

1.8. *Evaluation of student's work*

Course attendance	10%	Activity/Participation	30%	Seminar paper		Experimental work	
Written exam	15%	Oral exam	15%	Essay		Research	
Project		Sustained knowledge check	30%	Report		Practice	
Portfolio							

1.9. *Assessment and evaluation of student's work during classes and on final exam*

Evaluation will be performed according to the Legal act of evaluation of University of Rijeka and of School of medicine
 Students' performance will be evaluated thorough entire duration of the course (70% of the evaluation) as well as on the final exam (30% of the evaluation).

1.10. *Assigned reading (at the time of the submission of study programme proposal)*

World Health Organization (WHO), report on Community Based Rehabilitation
 Study programs, which are outside of recommended books, will be presented as additional literature on web pages of the Department.

1.11. *Optional / additional reading (at the time of proposing study programme)*



- Community Based Rehabilitation Asia Pacific Network
- The World Bank, Thematic Areas: Community Based Rehabilitation

1.12. Number of assigned reading copies with regard to the number of students currently attending the course

<i>Title</i>	<i>Number of copies</i>	<i>Number of students</i>

1.13. Quality monitoring methods which ensure acquirement of output knowledge, skills and competences

Anonymous evaluation questionnaire is given to the students at the end of the course. The rate of the course completion and grading is evaluated.