

Subject	PHYSIOTHERAPY OF DISORDERS OF MUSCULOSKELETAL SYSTEM
Study program	Three years of professional studies for graduated physiotherapist
Code	SF-313
Academic year	third
Semester	Sixth
Total classes	200
Credits	11
Type of subject	Obligatory
Preconditions	Fulfilled a requirement for third year
Responsible teacher	Prof. Erieta Nikolikj –Dimitrova, M.D., Ph.D.
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Key words	Studies of physiotherapists, professional subject, physiotherapy, musculoskeletal system
Goals of study	To acquire basic knowledge about how the assessment of the condition of the patient with orthopedic disease or injury to the musculoskeletal system To be able to work together in the rehabilitation of painful orthopedic disease or injury to the musculoskeletal system to acquire a knowledge about the positive effect of exercise therapy (kinesitherapy) in patients with orthopedic diseases or injuries of the musculoskeletal system To understand the importance of kinesitherapy, occupational therapy, orthopedic devices, sport and recreation in patients with orthopedic diseases or injuries of the musculoskeletal system To be able to educate patients with orthopedic diseases or injuries of the musculoskeletal system
Classes description (brief content)	Theoretical instruction (40 lessons)  Physiotherapeutic assessment of the condition of the tissues in patients with orthopedic diseases or injuries of the musculoskeletal system Contractures, prevention and conservative treatment, exercises in the treatment of patients with orthopedic disease or musculoskeletal injuries Kinesitherapy and education in congenital orthopedic diseases Kinesitherapy and education in acquired orthopedic diseases Kinesitherapy and education in orthopedic, traumatology, preoperative rehabilitation-kinesitherapy Early kinesitherapy in patients after surgery, venous insufficiency and thromboembolism, coma. Kinesitherapy after fractures. Kinesitherapy after soft tissue injuries

	<p>Rehabilitation of patients after amputation of upper and lower limb</p> <p>Application of orthopedic devices in the rehabilitation of patients with orthopedic disease or injury of the musculo-skeletal system</p> <p>Practical instruction (40 lessons):</p> <p>Training physiotherapist practical application of basic knowledge of kinesitherapy.</p> <p>Training physiotherapist application kinesitherapy in rehabilitation of patients with congenital or acquired orthopedic diseases.</p> <p>Training physiotherapist application kinesitherapy in rehabilitation of patients before the operation period, early rehabilitation after anesthesia, rehabilitation patient in coma.</p> <p>Training physiotherapist application kinesitherapy in rehabilitation of patients after amputation.</p> <p>Training physiotherapist for the application of orthopedic devices in the rehabilitation of patients with orthopedic diseases or injuries of the musculoskeletal system.</p> <p>Practice –practical training (120 hours):</p> <p>The practice is obligatory and is performed at different departments under guidance of a mentor-professor and physiotherapist responsible for that department. The student is obligated to be included in all the activities during the whole working time, and writes a diary for his activities.</p>
Organization	<p>Theoretical instruction: 40 lessons</p> <p>Practical instruction : 40 lessons</p> <p>Practice: 120 classes</p>
Learning methods	Lectures, practical lessons, practical training
Provided results of study	<p>Knowledge and understanding:</p> <p>Student will acquire knowledge of application kinesitherapy in rehabilitation of patients with orthopedic diseases, injuries in musculoskeletal system, in patients before the operation period, and early rehabilitation after anesthesia. The student will learn about the need for education of patients with orthopedic disease or injury to the musculoskeletal system.</p> <p>Key skills:</p> <p>Student will be able to apply knowledge of kinesitherapy further preparing plan of kinesitherapy in the treatment of patients with orthopedic disease or injury to the musculoskeletal system. The student will be able to apply orthopedic devices in the rehabilitation of patients with orthopedic disease or injury to the musculoskeletal system</p>

Specific recommendations for instruction	<p>The student is responsible to actively monitoring all the anticipated activities, including participation in continuous checks of knowledge to get a signature.</p> <p>Ranking student activities:</p> <table border="1" data-bbox="544 450 1353 719"> <tr> <th>Type of Activity</th><th>Points</th></tr> <tr> <td>Theoretical instruction *</td><td>5-10</td></tr> <tr> <td>Practical instruction **</td><td>10-20</td></tr> <tr> <td>Practice ***</td><td>5-10</td></tr> <tr> <td>Continuous checks-2</td><td>25-40</td></tr> <tr> <td>Practical Exam</td><td>15-20</td></tr> <tr> <td>total</td><td>60-100</td></tr> </table> <p>* Presence on theoretical instruction:  51% - 60% - 5 points;  61% - 70% - 6 points;  71% - 80% - 7 points;  81% - 90% - 8 points;  91% -100% - 10 points.</p> <p>* Practical training: every practical lessons brings 0.5 points (40 exercises):  presence - 0.25 points  activity on practical lesson- 0.25 points</p> <p>*** Success practice:  51% - 60% - 5 points;  61% - 70% - 6 points;  71% - 80% - 7 points;  81% - 90% - 8 points;  91% -100% - 10 points.</p> <p>Conditional criteria: The student is required to regularly textbooks attend theoretical and practical teaching approaches continuous checking. Verification of knowledge and is written and performed after lectures and exercises.  The practical part of the exam is performed after Practice, consists in checking the practical knowledge and evaluation of the diary kept by the student and evaluate behaviour and student engagement. Assessment of overall exam is obtained according to the table estimates, based on the sum of points from all activities including continuous checks and practical part the exam. The student is obliged to win a minimum score (60%) of continuous checking and practical exam otherwise, there is a complete final exam.</p> <p>Complete the Final Exam: The exam is written and / or</p>	Type of Activity	Points	Theoretical instruction *	5-10	Practical instruction **	10-20	Practice ***	5-10	Continuous checks-2	25-40	Practical Exam	15-20	total	60-100
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	practical. Consists of continuous checking and / or practical part of the exam that the student does not win minimum points.
Learning materials	<p>Basic: Authorized lectures in the Department</p> <p>Additional books:</p> <ul style="list-style-type: none"> <li>• Jeftic M. Clinical kinezsitherapy. University of Kragujevac. Faculty of medicine, Kragujevac,2001</li> <li>• Payton OD. Manual of Physical therapy.Churchill Livingstone, New York,1989</li> <li>• DeLisa JA. Rehabilitation medicine. JB Lippincott, Philadelphia, 2005</li> </ul>